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## ABSTRACT

This teacher's guide was developed for the last of four courses in Valencia Community College's Interdisciplinary Studies program, a 2-year core general education curriculum which chronologically examines the major developments in the evolution of human knowledge. The guide provides an introductory overview of the semester's content (i.e., the careful study of four books and the writing of a critical, literary research paper); introduces each unit; discusses each topic within each unit, including information on methodology and main points to be stressed; and provides student papers showing the work in each unit. The units of the course cover: (1) "Zen and the Art of Motorcycle Maintenance," by Robert Persig; (2) Writing a Critical, Literary Research Paper, during which class time is devoted to selecting a workable topic, finding information in the library, organizing information, and creating a final paper; (3) study of William Golding's "Lord of the Flies" in both print and film; (4) study of "The Tao of Physics," by Fritjof Capra, which introduces a discussion of developments in modern physics and their influence on new patterns of thinking in the Western world; and an introduction to Hinduism, Buddhism, and Taoism through religious texts; and (5) study of "Dune," by Frank Herbert. (AYC)

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ED245772

# TEACHER'S GUIDE

## PART IV

### Interdisciplinary Studies Program Valencia Community College Orlando, Florida

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## SEMESTER IV PLAN

### CONTENT:

The content of Semester IV is the careful study of four books and the writing of a critical, literary research paper. As students' skills have been maturing over the past three semesters, the level of difficulty has also increased. As a result of this, students are now interested in studying complete works rather than being satisfied with excerpts. They want to discuss in greater depth and also to know how all of the knowledge they have been learning fits together, not as units, or even as semesters, but as one body of thought. Therefore, the goals for this semester are the result of their intellectual growth. These goals are:

1. To study complete works in depth.
2. To learn sound research techniques.
3. To synthesize all the main themes of the past three semesters.
4. To introduce Eastern thought and show its relation to Western thought in the twentieth century.
5. To indicate some of the possible directions which future knowledge may take.

Finding the books which will accomplish these goals requires sifting through a massive amount of material and then trying to decide among the many possibilities. Zen and the Art of Motorcycle Maintenance by Robert Pirsig was a unanimous choice. This book traces the history of the split between objective and subjective philosophical systems and attempts to provide a way to heal this split. In addition, it tells the engaging story of a man's cross-country motorcycle trip with his young son, a trip taken in hopes of healing the split that exists between them. Through this book, four of the five goals above can be achieved. The study of this book is the content of Unit I.

Unit II is devoted to learning to write a critical, literary research paper. During this unit, class activities are devoted entirely to learning how to select a workable topic, how to find information in the library, how to organize information and how to create the final paper. Students generate workable topics from a list of general topics drawn from Zen and the Art of Motorcycle Maintenance. Each student then works methodically through a checklist of requirements until the final paper is produced.

After the research paper, a change of pace is needed. Since William Golding has won the Nobel Prize for Literature and since Lord of the Flies is his main work, this novel is selected as the focus for Unit III. In Unit III, students read and discuss the book and then watch and discuss Peter Brook's film adaptation of it. The object of the unit is to critique the film in light of the book and to pass judgement on the director's version so that the value of literature in its original state becomes a valuable discussion. To assist students in writing for this assignment, the movie critic from the local newspaper is invited to discuss critiquing movies with the class.

Unit IV centers on The Tao of Physics by Fritjof Capra. Developments in modern physics are leading the way to new patterns of thinking for the Western world. Capra's book examines these developments in physics in light of the metaphors provided by Eastern religions. Students study the latest in physics as well as learn something about Oriental patterns of thinking. Readings from The Tao of Physics are supplemented with excerpts from the religious texts of Hinduism, Buddhism, and Taoism. Several short films on these religions are also used to give variety to class presentations.

One of the worst problems in Semester IV is student burnout. To combat this, a science fiction novel is selected as the last work to be studied. Frank Herbert's Dune provides a nice ending to the course. Not only is it a good adventure story which keeps the students reading eagerly, it hits on many of the ideas that have been developed in earlier semesters. Class discussion is also enlivened by the final assignment on Dune. Students are asked to write a book review of Dune and to do this they are asked to assume the identity of one of the people studied in the program and to evaluate the book from that person's point of view. The process of selecting the person to write about and the exploration of possibilities for papers provides a lively stimulus to class discussion.

#### SKILLS AND COMPETENCIES:

During this semester, no new skills are introduced. We work on refining all of the skills previously introduced in the program. We hope that by working on these as a body of skills, students will internalize them and see them as the processes by which one achieves excellence and self-satisfaction.

#### TESTING:

There are no in-class tests this semester. There are four papers written out of class. In addition, there is a set of study questions on Zen and the Art of Motorcycle Maintenance that are averaged together and counted as one grade.

#### REACTION/SUGGESTIONS:

It's hard to say who learns more this semester, students or teachers. It is easy to say that we all find it delightful.

## UNIT I: ZEN AND THE ART OF MOTORCYCLE MAINTENANCE

### DESCRIPTION OF THE UNIT:

Zen and the Art of Motorcycle Maintenance by Robert Pirsig examines the personal implications of the development of the objective/subjective split in Western philosophy. In doing this, Pirsig traces the development of philosophy from its Greek beginnings through the scientific revolution of the 16th and 17th centuries, down to the present. This book provides a review and synthesis of all the major themes of this program.

By the end of Semester III, students begin asking questions about the possible relationships and interactions between objectivity and subjectivity. Pirsig's book comes as a welcome exploration of what they have been thinking about.

The study of the book is divided into six parts. Study questions for each part are passed out at the beginning of the unit. Students are asked to write answers to the study questions in order to prepare for each day's discussion. Each of the six parts is discussed in both small discussion groups and in the large group.

Time: 20 hours

### OBJECTIVES:

1. To synthesize the material taught in the first three semesters of the program.
2. To understand the implications of the split between objective and subjective methods of knowing and to see the relationships between these methods.
3. To read a good, contemporary novel which treats a complex philosophical subject in-depth.
4. To continue to develop students' ability to express themselves orally, in group discussion.
5. To continue developing students' skill at essay writing.
6. To provide students with an essay assignment through which they could formulate a personal philosophy of life.

### CONTENT:

Zen and the Art of Motorcycle Maintenance by Robert Pirsig. New York: Bantam Books, 1975.

### COMPETENCIES DEVELOPED:

#1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 15, 16, 17 & 18.

### TESTING/EVALUATION:

At the end of the unit, students write a paper stating their definition of Quality and examining how their definition is influenced by three of the chautauquas from Pirsig's novel. (A copy of the essay assignment follows.)

### REACTION/SUGGESTIONS:

Every time we use this book the students always ask us if the book is written for this course or if we create the course to fit the book. In fact, neither is true -- but it is a perfect match!

### QUALITY: (Essay Assignment)

Since Rhetoric is one of the arts most intimately connected to Quality, and the essay is one form of Rhetoric, it is fitting that you should end your study of Zen and the Art of Motorcycle Maintenance with an essay on Quality, the subject of Pirsig's novel. The subject of your essay is "My definition of Quality and how it was influenced by the chautauquas in Pirsig's novel, Zen and the Art of Motorcycle Maintenance." In the spirit of the book, your essay should be a synthesis of your classic and romantic understanding of Quality. Your essay should demonstrate this understanding in both its form and content. Listed below are the particular requirements for this essay. For instructional purposes, they have been divided dialectically into classic and romantic requirements, although you know that an essay of quality will transcend these dichotomies.

### CLASSIC REQUIREMENTS:

1. In defining Quality, you must show how your definition was influenced -- either positively or negatively -- by three different chautauquas from the novel.
2. Use direct quotations from the novel in developing the ideas from the chautauquas and the relationship of these ideas to your definition. Develop the content, interpretation and the relationship of each quote to the idea(s) you are developing. After each quote, cite the page number(s) of the quote in parentheses. For example:

"I am a pioneer now, looking onto a promised land." (p. 79)

3. Limit your paper to approximately 1,000 words. Limit your subject appropriately so that you can set it forth clearly in this length.
4. Use either the TRLT structure or another equally appropriate structure.
5. Have your paper typed using double spacing (preferred) or have it neatly handwritten. Include a cover page on which you have your title, your name, your Beta leader's name and the date.

6. Have your paper ready to turn in on Monday, February 6, 1984. The final grade on late papers will be lowered by one letter. For example, a late paper which would have been an "A" will be marked a "B". Every student must turn in a paper.

ROMANTIC REQUIREMENTS:

The paper should be unified, inspired, sensitive, and have depth. It should flow. It should be "hip". It should have soul. It should transcend regurgitation.

ONE LAST NOTE:

This paper should be the product of a caring attitude. Anything less will satisfy neither you nor us. Anything less will be unworthy of you.

UNIT I:  
ZEN AND THE ART OF MOTORCYCLE MAINTENANCE  
INTRODUCTION TO THE BOOK

RATIONALE FOR TOPIC:

Since this is the first day of the new semester, half of the time is used for getting re-acquainted and with paper work. The second part of the period is spent introducing students to reading a novel and in particular, to giving them some information on Buddhism and on Zen.

DESCRIPTION OF LEARNING ACTIVITY:

Students meet in the large group for all activities.

Time: 3 hours

MAIN IDEAS STRESSED:

1. The plan for the semester is introduced and discussed.
2. The novel is briefly introduced. Mentioned were its theme, style and the necessity for keeping up with the readings and doing the study questions.
3. Buddhism is introduced. A brief biography of Buddha is given and then the main tenets of Buddhism are presented. The tenets presented are:
  - a. the importance of suffering and struggle
  - b. the Four Noble Truths
  - c. the idea of a transcendental reality
  - d. enlightenment as an experience of unity
4. The origin of Zen Buddhism is discussed and its major tenets are introduced. Tenets introduced are:
  - a. the idea that Zen sought to return to the original roots of Buddhism
  - b. suffering and struggle originate in ignorance
  - c. "Zen is the art of seeing into the nature of one's own being, and it points the way to freedom." (D.T. Suzuki)
  - d. each being is part of the Buddha nature
  - e. each individual has the potential to perceive the unity of being
  - f. enlightenment is not an intellectual perception, not an emotional perception, not "this" or "that"; it is a totality which encompasses all dualisms and transcends them
  - g. suffering deepens character -- through it we see the meaning of life
  - h. enlightenment is a purely personal experience; "only by drinking the water do you discover whether it is hot or cold."
  - i. Zen is not a religion, it is a way of life. It has no dogma.



- j. the goal of Zen is satori, an intuitive look  
into the nature of things. Satori is:  
irrational  
noetic  
authoritative  
affirmative  
transcendent  
impersonal  
exalting  
momentary

REACTION/SUGGESTIONS:

The lectures are well received.

## ZEN AND THE ART OF MOTORCYCLE MAINTENANCE: PART I

### RATIONALE FOR TOPIC:

Breaking the novel into several parts allows the students to pace their reading and it also allows for more directed class discussion. In a book like this, working through the parts is necessary to comprehending the philosophical meaning.

### DESCRIPTION OF LEARNING ACTIVITY:

The following format is used for each class on Zen and the Art of Motorcycle Maintenance. Students meet in small groups first to discuss the reading assignment and the answers to the study questions. Then they meet in the large group for a lecture/discussion. The topic of the lecture is "Quality."

Time: 3 hours

### READING ASSIGNMENT:

Chapters 1-7, pp. 3-79, from Zen and the Art of Motorcycle Maintenance by Robert Pirsig, New York: Bantam Books, 1975.

### MAIN IDEAS STRESSED IN THE LECTURE:

1. The importance of the subtitle of the novel, "an inquiry into values."
2. Phaedrus' mental breakdown: caused by his obsession with one frame of reference.
3. Electric shock therapy: one result -- temporarily obliterates the obsession with one perspective.
4. The Classical Greek character, Phaedrus: from the Platonic dialogue, a teacher of rhetoric in search of truth.
5. The split: the world has divided itself into two frames of reference -- the Romantic and the Classic.
  - a. the narrator purposefully places them in a paradoxical relationship
  - b. in the modern world, technology has heightened this split by alienating the Romantic
  - c. The Making of a Counter Culture by Theodore Roszak was one of the first books to address this split. It identified the "technocracy" as the basic form of contemporary American society and "the myth of objective consciousness" as its underlying thought pattern
6. Perhaps because the narrator has been insane, he has an intense concern with epistemology. He asks, "What is the process by which we know?" "How should we use this process?" "What does it produce?" and "How valid are its results?"

7. The Classic mode is one which deals with the underlying form and the analysis of this form. This mode has a creative element, but most people fail to see it. On the other hand, the Romantic mode attempts to perceive directly and holistically.
8. Today's problem lies in the fact that few people are attempting to relate these two modes. They are treated as mutually exclusive but do not have to be so.

REACTION/SUGGESTIONS:

Both the discussion and the lecture goes well. Coming back into the large group for the lecture gives students a feeling of continuity and summing up.

Worksheet #1: Zen and the Art of Motorcycle Maintenance

Assignment: Read carefully Chapters 1-7, pp. 3-79. As you read, underline or highlight passages which you feel are important. Mark any passages which you feel need further clarification. Then complete the following worksheet. Make two copies of your answers, one to keep and one to turn in. These are due at the beginning of the period (9:00 A.M.). One letter grade will be deducted for late papers.

Directions:

In Chapters 1-7, the narrator ("I") focuses on three main points: (1) the split between two perceptions of reality which has developed in contemporary society; (2) his definitions of these two modes of perception, the classic and the romantic; and (3) the implications for the individual of this split. Examine each of the following pages listed below carefully in light of these three points. Then write a well-developed paragraph summarizing the information which the narrator recounts on each of these main points in Chapters 1-7. (Write one paragraph on the split in contemporary society, one on the definitions of the two modes and one on the personal implications of the split.)

Examine these pages carefully.\*

- p. 15:               the effects of technology; its relation to the split
- p. 29:               physics and logic as the ghosts and spirits of modern man
- p. 45-49,  
60-61               specific elements of the classic and romantic modes
- pp. 66-69           "the knife", its symbolism and the effect of its use on  
                          the narrator
- p. 79                the significance/symbolism of the last sentence of Chapter 7

\*This doesn't mean that these are the only important pages, or that these are the only pages you should read, or that you will not find additional material for your summary paragraphs on other pages. These pages should help you focus your study.

## ZEN AND THE ART OF MOTORCYCLE MAINTENANCE: PART II

### RATIONALE FOR TOPIC:

Breaking the novel into several parts allows the students to pace their reading and it also allows for more directed class discussion. In a book like this, working through the parts is necessary to comprehending the philosophical meaning.

### DESCRIPTION OF LEARNING ACTIVITY:

The following format is used for each class on Zen and the Art of Motorcycle Maintenance. Students meet in small groups first to discuss the reading assignment and the answers to the study questions. Then they meet in the large group for a lecture/discussion. The topic of the lecture is "Quality."

Time: 3 hours

### READING ASSIGNMENT:

Chapters 8-15, pp. 82-167, from Zen and the Art of Motorcycle Maintenance by Robert Pirsig, New York: Bantam Books, 1975.

### MAIN IDEAS STRESSED IN THE LECTURE:

1. The world and reality are synonymous.
2. The distinction between classic and romantic can be understood by developing a contrasting list of words synonymous with each mode. A partial list of those offered by students includes:

#### Classic

functional  
intellectual  
rational  
cerebral  
scientific  
square  
analyses  
masculine  
laws  
careful  
restrained  
detached  
motorcycle  
maintenance

#### Romantic

appearance  
emotional  
intuitive  
artistic  
immediate  
hip  
esthetics  
feminine  
freedom  
pleasure-seeking  
erratic  
involved  
motorcycle  
riding

3. Logic is only one tool in one epistemology. It is not the "be all" and "end all" of reality. It has its limitations.
4. Logic is both inductive and deductive. Both of these methods are part of the modern scientific method, as are intuition and creativity.
5. Albert Einstein recognized this connection. Pirsig discusses this on pp. 97-99.

6. It is important to recognize the role of relativity in determining the nature of truth. (see p. 100)
7. The nature of Kant's Copernican Revolution, his attempt to synthesize objective and subjective modes, is discussed.
8. Finally, the nature of the real university is discussed.

REACTION/SUGGESTIONS:

Both the discussion and the lecture goes well.

Worksheet #2: Zen and the Art of Motorcycle Maintenance

Assignment #2: Read carefully Chapters 8-15, pp. 82-167. As you read, underline/highlight passages which you feel are important. Mark any passages which you feel need further clarification. Then complete the following worksheet. Make two copies of your answers, one to keep and one to turn in. These are due at the beginning of the period, (9:00 A.M.). One letter grade will be deducted for late papers.

Directions: In Part II, the narrator examines in greater detail two of the three main points he began developing in Part I. He further defines the two modes of perception (1) and further discusses the split between the two modes (2). In addition, he relates his (and Phaedrus') dissatisfaction with the scientific/technological approach and its expression as enshrined in "the Church of Reason." Examine each of the following pages listed below carefully in light of these three points. Then write a well-developed paragraph summarizing the information which the narrator recounts on each of these main points in Chapters 8-15. In developing your paragraph on the two modes of perception include the following:

- a. method(s) of inquiry of each mode
- b. kind(s) of truth produced by each mode
- c. limitation(s) of each mode

EXAMINE THESE PAGES CAREFULLY\*

- p. 84: classic and romantic barriers
- pp. 87-92: Hierarchies and how to navigate in them
- pp. 92-101: Rationality; inductive and deductive processes; (92-93) the scientific method; the formulation of hypotheses, "the genetic defect" in reason (101).
- pp. 114-115: contributions of Kant and Hume
- pp. 115-116: objections to the strict Empiricism of Hume
- pp. 116-119: Kant's Critique of Pure Reason -- its value is in understanding the process
- pp. 131-134: "The Church of Reason" vs. the real university; Phaedrus' dedication to the Church of Reason; narrator's statement, "you are never dedicated to something you have complete confidence in... it's always because these dogmas or goals are in doubt." (p. 134)
- pp. 145-153: The instructions for assembling the rotisserie as a metaphor for the split between art and technology; the cultural consequences of that split.

\*This does not mean that these are the only important pages, or that these are the only pages you should read, or that you will not find additional material for your summary paragraphs on other pages. These pages should help you focus your study.

## ZEN AND THE ART OF MOTORCYCLE MAINTENANCE: PART III

### RATIONALE FOR TOPIC:

Breaking the novel into several parts allows the students to pace their reading and it also allows for more directed class discussion. In a book like this, working through the parts is necessary to comprehending the philosophical meaning.

### DESCRIPTION OF LEARNING ACTIVITY:

The following format is used for each class on Zen and the Art of Motorcycle Maintenance. Students meet in small groups first to discuss the reading assignment and the answers to the study questions. Then they meet in the large group for a lecture/discussion. The topic of the lecture is "Quality."

Time: 3 hours

### READING ASSIGNMENT:

Chapters 16-18, pp. 167-203, from Zen and the Art of Motorcycle Maintenance by Robert Pirsig, New York: Bantam Books, 1975.

### MAIN IDEAS STRESSED IN THE LECTURE:

1. Students are asked to circle the word from the following list which does not belong.  
  
SKYSCRAPER      PRAYER      TEMPLE      CATHEDRAL
2. This exercise forces students to apply the knife of reason, analyzing by either form or function. The use of the knife of reason is discussed.
3. In the novel, the mountain which he and his son climb is both literal and symbolic.
4. This section of the book begins Phaedrus' investigation into Quality. This investigation has two distinct phases. One goal of the investigation is to heal the split between the classic and romantic modes. Another goal of the novel is to heal the split between himself and his son, and between himself and Phaedrus.
5. In the first phase of Phaedrus' investigation into Quality, he experiments with the students in his classes. He teaches them not to imitate but to look internally in searching for quality.
6. At the end of this phase, Phaedrus concludes that Quality can heal the split. He feels that if he can understand Quality, he can heal the split.
7. Yet Phaedrus soon realizes that Quality is cleaved in two by the knife of analysis, and to avoid the creation of a classic vs. a romantic quality, he will have to keep Quality out from under the knife.



8. Phaedrus arrives at the understanding that Quality is a non-intellectual event.

REACTION/SUGGESTIONS:

Both the discussion and the lecture goes well.

Worksheet #3: Zen and the Art of Motorcycle Maintenance

Assignment #3: Read carefully Chapters 16-18, pp. 167-203. As you read, underline or highlight passages which you feel are important. Mark any passages which you feel need further clarification. Then complete the following worksheet. Make two copies of your answers - one to keep and one to turn in. These are due at the beginning of the period (9:00 A.M.). One letter grade will be deducted for late papers.

Directions: In Chapters 16-18, the narrator takes up Phaedrus' inquiry into Quality. The narrator explains that this inquiry had two phases. In the first phase of this inquiry, Phaedrus experimented with Quality in his classroom. This was the non-metaphysical phase of the inquiry. In the second phase, which was metaphysical, Phaedrus experienced three waves of crystallization. (The first wave is covered in these chapters, the second and third in later chapters.) Examine carefully the pages listed below and then summarize each phase in a well-developed paragraph. In summarizing the first phase include: a description of Phaedrus' classroom experiments and the conclusions about the nature of education, the nature of Quality and the relationship of education to Quality. Summarize the second phase in terms of Phaedrus' conclusions about the nature and existence of Quality and the problem in defining Quality.

EXAMINE THESE PAGES CAREFULLY\*

The First Phase: pp. 171-172

original and direct seeing vs. imitation; the relationship of these to education/university (the girl with the strong-lensed glasses)

pp. 174-181: eliminating grades: purpose, effect on students and the relation to Quality

pp. 184-187: what Quality is and its relation to teaching of Rhetoric

The Second Phase:

pp. 193-194: the proof of the existence of Quality via realism

pp. 199-200: hip vs. square; the true nature of Quality and why it can heal the split

\*This does not mean that these are the only important pages, or that these are the only pages you should read, or that you will not find additional material for your summary paragraphs on other pages. These pages should help you focus your study.

## ZEN AND THE ART OF MOTORCYCLE MAINTENANCE: PART IV

### RATIONALE FOR TOPIC:

Breaking the novel into several parts allows the students to pace their reading and it also allows for more directed class discussion. In a book like this, working through the parts is necessary to comprehending the philosophical meaning.

### DESCRIPTION OF LEARNING ACTIVITY:

The following format is used for each class on Zen and the Art of Motorcycle Maintenance. Students meet in small groups first to discuss the reading assignment and the answers to the study questions. Then they meet in the large group for a lecture/discussion. The topic of the lecture is "Quality."

Time: 3 hours

### READING ASSIGNMENT:

Chapters 19-23, pp. 203-246, from Zen and the Art of Motorcycle Maintenance by Robert Pirsig, New York: Bantam Books, 1975.

### MAIN IDEAS STRESSED IN THE LECTURE:

1. "What is consciousness?" Labels have been put on it from both the romantic and classic modes. It has been broken down into objective and subjective components. However, Phaedrus explores the idea that it may exist as a metaphysical reality. Could consciousness be a manifestation of Quality?
2. There are similarities between Phaedrus' conception of Quality and the idea of perfection presented in Jonathan Livingston Seagull by Richard Bach.
3. There are also similarities between Phaedrus' definition of Quality and most people's conception of beauty; also being.
4. The Tao, or Way, implies a destination for most people. But thinking of the Way as a destination is one of the traps people fall into, the trap which attaches non-physical concepts to physical objects. The Way is not a destination but a process containing the infinite possibility for everything.
5. The metaphysical world must be considered as real as the physical world since these definitions are mutually dependent.
6. One way of thinking of Quality is that particular definitions of Quality, particular ideas about Quality, are emanations of the metaphysical entity, Quality. One can conceive of Quality as a metaphysical entity only through a pre-intellectual realization that exists prior to a logical discussion.

7. Poincaré used this method of reasoning in arriving at his concept of truth and process in mathematics. He recognized the intuitive jumps made by the mind as it searches for harmony.
8. To the narrator, Poincaré's discovery proves the existence of Quality. If these intuitive jumps could not afterward be confirmed by mathematical proof, they would be the product of chance; but since they can be confirmed, they must be the product of an intuitive glimpse of metaphysical reality.
9. One creates the concept of Quality in one's own life only when one operates from the larger, metaphysical perception and does not allow Quality to be limited by objects or other's ideas.

REACTION/SUGGESTIONS:

Both the discussion and the lecture goes well.

Worksheet #4: Zen and the Art of Motorcycle Maintenance

Assignment #4: Read carefully Chapters 19-23, pp. 203-246. As you read, underline or highlight passages which you feel are important. Mark any passages which you feel need further clarification. Then complete the following worksheets. Make two copies of your answers - one to keep and one to turn in. These are due at the beginning of the period (9:00 A.M.). One letter grade will be deducted for late papers.

Directions:

In Chapters 19-23, the narrator completes his explanation of the second phase of Phaedrus' inquiry into the nature of Quality. It begins with the presentation of the dilemma by his colleagues at Bozeman and ends with Phaedrus' conclusion that the world was composed of three things: mind, matter and Quality (pp. 205-215 and 221-228). Along the way, the narrator adds some of his own (not Phaedrus') insights into the nature of reality and finally arrives at Jules Henri Poincaré's, one thinker who also understood where the two modes melt. Summarize Phaedrus' struggle with the dilemma and the conclusions he reached about it in a well-constructed paragraph. Also, be prepared to answer the questions listed below in class. (You do not have to write out the answers.)

EXAMINE THESE PAGES CAREFULLY:

For your summary:

- |             |   |
|-------------|---|
| p. 205      | the presentation of the dilemma and the problem it presents   |
| pp. 207-208 | the path Phaedrus chooses to solve the dilemma; the first <u>horn</u> of the dilemma  |
| pp. 209-213 | the role of scientific materialism and classic formalism in the dilemma; how Phaedrus refuted these                         |
| pp. 213-215 | Phaedrus' conclusions about Quality; Quality as an event; "The Sun of quality..."   |
| pp. 222-224 | Quality as pre-intellectual reality; why classics and romantics perceive Quality differently; his answer to his colleagues. |
| pp. 224-228 | The nature of Quality; Quality in the <u>Tao Te Ching</u> .   |

For Class Discussion:

- p. 231            Can quality be the central term of religion, art and science?
- p. 233            What path did Phedrus take to his understanding of Quality?  
                  What path did Poincare' take?  
                  What is significant about the two different paths?
- pp. 234-236        What did Poincare' conclude about the axioms of geometry? Why  
                  is his conclusion significant?
- pp. 237-240        According to Poincare', what are facts? How are they discovered?  
                  What is the significance of this?  
                  How do you approach mathematics -- classically or romantically?
- pp. 241-242        What is the relationship between harmony and quality? How do  
                  Phaedrus' understanding and Poincare's understanding unite  
                  science and art?

\*This does not mean that these are the only important pages, or that these are the only pages you should read, or that you will not find additional material for your summary paragraphs on other pages. These pages should help you focus your study.

## ZEN AND THE ART OF MOTORCYCLE MAINTENANCE: PART V

### RATIONALE FOR TOPIC:

Breaking the novel into several parts allows the students to pace their reading and it also allows for more directed class discussion. In a book like this, working through the parts is necessary to comprehending the philosophical meaning.

### DESCRIPTION OF LEARNING ACTIVITY:

The following format is used for each class on Zen and the Art of Motorcycle Maintenance. Students meet in small groups first to discuss the reading assignment and the answers to the study questions. Then they meet in the large group for a lecture/discussion. The topic of the lecture is "Quality."

Time: 3 hours

### READING ASSIGNMENT:

Chapters 24-26, pp. 246-294, from Zen and the Art of Motorcycle Maintenance by Robert Pirsig, New York: Bantam Books, 1975.

### MAIN IDEAS STRESSED IN THE LECTURE:

1. The setting in the book is symbolic of the state of mind of the narrator. One of the instructors, having been on the same Westward route as Pirsig's narrator, can show slides which allow students to see the places Pirsig is talking about.

<u>Slides</u>	<u>Passages</u>
Central Plains	p. 3
Storms over the Plains	p. 17
Prairie	p. 18
High Plains	p. 43
Hills on High Plains	p. 44
Baker	p. 72
Grand Canyon	p. 78-79
Montana	p. 84
Yellowstone Valley	p. 92
Mountains	p. 103
Yellowstone Park	p. 105
"High Country," Mt. Evans	pp. 109-111
Gardiner	p. 127
Green fields	p. 137
Bozeman	p. 154
Continental Divide	p. 236
Oregon	p. 271
Desert	p. 290
California highway	p. 313
California redwoods	p. 321
Mendocino County	p. 363
California coast	p. 364

2. The second theme of the lecture was the author's use of structure and rhetorical techniques. Discussed were:

introduction	(Chapter 1)
symbolism	pp. 17, 18, 19, 43 & 103
dialogue	p. 29
description	pp. 44 & 63
metaphor	pp. 65 & 69
categorizing	p. 92
analyzing	pp. 93 & 96
comparison	p. 111
transitions	p. 164
allegory	p. 167
irony	p. 246

3. Another purpose of this lecture was to show that Pirsig demonstrated 'quality' as he wrote the novel, ZAMM, by following a TRIT format related to that taught to the students in this program. In addition to this, a specific 'quality' was demonstrated by the author as he fit all of the elements of his thesis (story) carefully together by using setting so dramatically. As the protagonist takes each step toward his psychological fulfillment, he meets a physical terrain to match his mood. Consequently, students can see that the general theme, coupled with many sub-plots, can be well-developed and setting plays a very subtle but important part along the way.

#### REACTION/SUGGESTIONS:

Both the discussion and the lecture goes well.



Worksheet #5: Zen and the Art of Motorcycle Maintenance

Assignment #5: Read carefully Chapters 24-26, pp. 246-294. As you read, underline or highlight passages which you feel are important. Mark any passages which you feel need further clarification.

Directions:

In Chapters 24-26, the narrator further examines the nature of Quality. In doing this, he discusses: caring (p. 247), stuckness (p. 250-257), technological ugliness (p. 261), peace of mind, (p. 264), and gumption (p. 272). Your assignment is to select one of these ideas to discuss with the class. Be prepared to summarize what the narrator says about this idea and to comment on the validity of his statements. In addition, the narrator discusses gumption traps on pages 274-294. He lists several kinds of gumption traps:

External traps, i.e. the parts trap  
Internal traps, i.e. value traps  
ego traps, anxiety traps, boredom traps,  
truth traps, muscle traps and psychomotor  
traps.

Select two of these traps and be prepared to give the class examples of these traps, preferably examples of your experience in being caught in them.

NOTE: Class discussion will depend on your (singular) preparation. Your Beta leader will not fill in for unprepared students!

IF IT'S BORING, IT'S YOUR FAULT!

## ZEN AND THE ART OF MOTORCYCLE MAINTENANCE: PART VI

### RATIONALE FOR TOPIC:

Breaking the novel into several parts allows the students to pace their reading and it also allows for more directed class discussion. In a book like this, working through the parts is necessary to comprehending the philosophical meaning.

### DESCRIPTION OF LEARNING ACTIVITY:

The following format is used for each class on Zen and the Art of Motorcycle Maintenance. Students meet in small groups first to discuss the reading assignment and the answers to the study questions. Then they meet in the large group for a lecture/discussion. The topic of the lecture is "Quality."

Time: 3 hours

### READING ASSIGNMENT:

Chapters 27-32, pp. 297-373, from Zen and the Art of Motorcycle Maintenance by Robert Pirsig, New York: Bantam Books, 1975.

### MAIN IDEAS STRESSED IN THE LECTURE:

During this lecture session, students are asked to give their personal reactions to the book. Further discussion is also held about Quality. Students discuss some of the ideas they are thinking of writing about.

### REACTION/SUGGESTIONS:

Both the small group discussion and the lecture/discussion goes well.

Worksheet #6: Zen and the Art of Motorcycle Maintenance

Assignment #6: Read carefully Chapters 27-32, pp. 297-373. As you read, underline or highlight passages which you feel are important. Mark any passages which you feel need further clarification. Then complete the following worksheet. Make two copies of your answers - one to keep and one to turn in. These are due at the beginning of the period (9:00 A.M.). One letter grade will be deducted for late papers.

Directions: In the concluding chapters, the narrator relates Phaedrus' experiences at the University of Chicago, the events leading up to Phaedrus' nervous breakdown, and in a dramatic climax, comes to understand the nature of the relationship between himself, Phaedrus and Chris. In one well-written paragraph, explain the meaning and significance of the last paragraph of the book, pp. 372-373. ("Trials never end, of course...you can sort of tell these things!")

EXAMINE THESE PAGES CAREFULLY\*

(These questions will be the focus of class discussion.)

- p. 305           What are the substantive and methodological aspects of any discipline? How are they related?
- pp. 315-317      What is the mythos/logos argument? Why is it significant? How is it related to insanity?
- pp. 331-333      What are the differences between Plato and Aristotle? Why are these significant to Phaedrus?
- pp. 335, 337, 304, 342-343   What was Plato's goal? How did Plato's goal differ from the Sophist's goal? What is arete to Plato? The Sophists? Aristotle?
- pp. 334, 357, 359   What finally drives Phaedrus to his mental breakdown?
- pp. 361, 369, 370   What is the meaning of the narrator's dream?

\*This does not mean that these are the only important pages, or that these are the only pages you should read, or that you will not find additional material for your summary paragraphs on other pages. These pages should help you focus your study.

## UNIT II: WRITING A RESEARCH PAPER

### DESCRIPTION OF THE UNIT:

Learning to write a research paper is an important part of the curriculum for this program. It is always one of the most frustrating experiences for the staff and the students because it requires learning so many new skills at once. While a few of the students have written research papers before, few have been called on to gather information from which they could draw their own conclusions. They have previously used conclusions of others for the endings of their papers. Experience has shown that the only way we have been able to be successful with the research paper is to concentrate on it alone. Therefore, all class time in this unit is devoted to this end. Much time is spent meeting with individual students to discuss progress. Time is allotted to help students with library research -- although this is not enough time to do all the research needed to complete the paper.

Students are given a check-off sheet to help them budget their time and to learn the steps in proper research. They are also given a series of intermediate goals which they must meet. It is stressed that no paper is acceptable unless the student has gone through the proper sequence, has gone through the process of research.

A course outline and copies of the check-off sheets follow this plan. These are in lieu of the class-by-class breakdowns which usually accompany the unit plan.

Time: 21 hours

### OBJECTIVES:

1. To teach students the process for writing a critical, literary research paper.
2. To teach students the mechanics of writing a critical, literary research paper.
3. To teach students to recognize when sufficient research has been done and how to formulate a thesis and conclusion(s) from this research.
4. To teach students how to select an appropriate topic, one which can be covered in the scope of the paper.
5. To help students continue to develop their writing skills.
6. To give students the opportunity to work closely with one member of the staff.
7. To help students learn the discipline of self-education.

CONTENT:

Chapters 12 and 13 from Writing With A Purpose, Seventh Edition, by James M. McCrimmon, Boston, Mass.: Houghton, Mifflin Company, 1980.

COMPETENCIES DEVELOPED:

#1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18.

TESTING/EVALUATION:

Students are required to turn in a typed final draft, a rough draft and all of their note cards. Papers with mechanical errors are returned and have to be corrected before being accepted. Students with inadequate research, faulty conclusions or other content problems have to rework their papers until they are considered acceptable college-level work.

REACTION/SUGGESTIONS:

This is the most difficult unit in the entire program for the students. Many of them are not good at budgeting their time and juggling their responsibilities. Completing this paper becomes a major hurdle for all of them. The placement of this paper has been a major problem for the staff. Early in the term, it discourages many. Late in the term, fewer get it completed. It's one of the units which still requires more refinement.

## POSSIBLE TOPICS FOR A RESEARCH PAPER

Compare the narrator's enlightenment in Pirsig's novel to that of Siddhartha's in Herman Hesse's Siddhartha

The source of the law of gravity and the implications of that law

Some origins of the scientific point of view

Mathematical truth according to Poincaré

The shattered Gilded Age

Separating art and manufacture -- some representative splits

An interpretation of The Rubaiyat of Omar Khyam, its' classic and romantic elements

The authority of the Aristotelian tradition to define values

Man as a product of his environment; 1984 by George Orwell

Anxiety and ego: Freud vs. Pirsig

Kitto's explanation of the sould of the Homeric hero, its relevance today

Arete and dharma as rhetorical techniques

The Jazz Age

Setting as a structural device

Different hierarchies of thought

Some obscure figures in search of knowledge

Empiricism -- Truth or Fiction

The philosophical basis of causation

Time and Space: Pirsig vs. Kant or Hume

Cognitive psychology

John Locke's contribution to objectivity

Rene Descartes, Classic or Romantic?

Knowledge and knowing: Pirsig and Castaneda

Comparison and contrast: Zen Buddhism and Existentialism

Eric Fromm's The Art of Loving as a prescription for healing the classic-romantic split

Orwell's 1984 as a world without Quality

UNIT II: RESEARCH PAPER  
COURSE OUTLINE

RESEARCH PAPER SCHEDULE - OR - Research Paper Maintenance of a classical model

TEXT: McCrimmon, Writing With a Purpose, 7th edition.

Working Definition of a Research Paper

- Model handout
- Length, 8 typewritten pages excluding title page, outline, footnotes and selected bibliography
- An analytical paper - Topic drawn from Pirsig's Zen and the Art of Motorcycle Maintenance

Wednesday, February 1

Assignment For Today:

Read - McCrimmon, Choosing a Subject, p. 330  
Select topic (see list)

9:00 - 10:30	BETA: Bring choices to class, (one selected--save others)
10:30 - 10:40	Break
10:40 - 11:50	ALPHA: Discussion of models

Monday, February 6

Assignment For Today:

Read - McCrimmon, Part 1, Ch. 3, p. 45 - Preliminary Thesis Sentence and Bibliography, p. 332  
Write Preliminary Thesis Sentence, "The Purpose of the Paper is..."  
(to be dropped when paper is written)  
Bring 10 bibliography cards to BETA

9:00 - 10:30	BETA - Thesis Sentence and bibliography cards checked by BETA Leader
10:30 - 10:40	Break
10:40 - 11:50	ALPHA - Discussion of Library Research

Wednesday, February 8

Assignment For Today:

Read McCrimmon, Note-Taking, p. 339  
Write Final Thesis Sentence

9:25 - 10:30	<del>BETA - Final Thesis Sentence checked by BETA Leader</del> <del>Bibliography cards checked by BETA Leader</del>
10:30 - 10:40	Break
10:40 - 12:05	ALPHA - Discussing Library Research

Monday, February 13

Assignment For Today:

Read McCrimmon, Outlining a Thesis, p. 55 and p. 343  
Write Note Cards (10+), Write additional bibliography cards  
Write Preliminary Outline arranged in Deductive Order

9:25 - 10:30	BETA - Preliminary outline and note cards checked by BETA Leader
10:30 - 10:40	Break
10:40 - 12:05	ALPHA - Discussing Progress on Research

Wednesday, February 15

Assignment For Today:

Read McCrimmon, Quoting and Plagiarism, p. 340 and p. 523  
Write +25 note cards with significant sentences, plot summary, summarize author's position, etc.  
Write preliminary outline

9:25 - 10:30	BETA - BETA Leader check note cards
10:30 - 10:40	Break
10:40 - 12:05	ALPHA - Models Discussed

Friday, February 17

Rough Draft Due

Monday, February 20

Assignment For Today

Read McCrimmon, Topic Outline, p. 56  
Write topic outline in final outline form (See McCrimmon, p. 344)  
Prepare oral report

9:25 - 11:20	BETA - final outline and rough draft checked by BETA Leader Oral Research Report due
11:20 - 11:30	Break
11:30 - 12:05	ALPHA - Library Research

Wednesday, February 22

Assignment For Today

Read McCrimmon, pp. 346-348  
Rough draft returned  
Note: Final Paper Due, February 29

9:25 - 10:30	BETA - Rough Draft returned/conferences
10:30 - 10:40	Break
10:40 - 12:05	ALPHA - Library Research



In order to avoid the three most common errors:

1. Always write in the present tense, 3rd person singular
2. Avoid contractions and phrases that begin, "...In my opinion, I believe, I feel, etc."
3. Note specific technicalities regarding Research Paper format. (McCrimmon, p. 330ff)

Research Paper

Participation Progress Report

NAME \_\_\_\_\_

BETA LEADER \_\_\_\_\_

- |    |  |     |    |
|----|--|-----|----|
| 1. | Research paper topic due 2/1/84                    | YES | NO |
|    | TOPIC:   |     |    |
|    | Bibliography cards (10+) due 2/6/84                | YES | NO |
| 2. | Preliminary thesis sentence due 2/6/84             | YES | NO |
|    | Preliminary<br>thesis sentence:                    |     |    |
| 3. | Final thesis sentence due 2/8/84                   | YES | NO |
|    | Final thesis sentence:                             |     |    |
|    | Additional bibliography cards (20+) due<br>2/13/84 | YES | NO |
| 4. | Note cards due (10+) 2/13/84                       | YES | NO |
| 5. | Preliminary outline due 2/13/84                    | YES | NO |
| 6. | Final outline due 2/15/84                          | YES | NO |
| 7. | Research oral report 2/20/84                       | YES | NO |
| 8. | Rough draft due 2/17/84 by noon                    | YES | NO |
|    | Rough draft returned 2/22/84                       | YES | NO |
| 9. | Final research paper due 2/29/84                   | YES | NO |

## SUBJECTIVE REFLECTIONS ON WRITING A RESEARCH PAPER

### Advice From Those Students Who Proceeded You On The Way To Their Research Paper

1. What are the most valuable things you learned about the research process while working on your research paper?
  1. Narrow your thesis and the material involved.
  2. Strong emphasis on research.
2. What are the most significant things you learned about yourself while working on your research paper?
  1. Confidence in one's self.
  2. Commitment to the work involved.
  3. That a super person doesn't exist in this entity.
3. If you were given the task of directing a group of students through the research and writing of a research paper, what would you stress (change emphasis)?
  1. More time between rough and final draft.
  2. Do not procrastinate.
  3. Don't become frightened when stuck but get even more determined!
4. If you have a friend about to begin writing a research paper -- what would you tell him/her?
  1. Importance of note cards
  2. Follow the steps given by the instructors
  3. Start early (a heavy favorite)
  4. Use library effectively
  5. Don't get sick.
5. Reflecting back over your experiences researching and writing a research paper, what would you do differently the second time?
  1. Proofread
  2. Don't take I.D.S.
  3. Avoid personal problems
6. Additional comments:
  1. Learned a lot and enjoyed it.
  2. Good and important preparation.
  3. Pain in the rear but a needed one.
  4. Let's do a practice one first.

## ORAL REPORT ON RESEARCH PAPER

A meaningful and valuable part of your college education should be the development of an ability to stand up before a group and to express your ideas orally.

To take advantage of an opportunity to begin that development, you are to prepare the following assignment:

AT THE SPECIFIED DATE(S), (FEBRUARY 20TH) YOU WILL BE CALLED UPON TO GIVE A THREE-TO-FIVE MINUTE ORAL REPORT ON YOUR RESEARCH PAPER. THIS ORAL REPORT SHOULD BE A SUMMARY, INCLUDING THE MOST INTERESTING AND/OR IMPORTANT INFORMATION YOU HAVE LEARNED FROM THE RESEARCH. YOU SHOULD ALSO EXPLAIN HOW OR WHY YOU CHOSE THAT PARTICULAR TOPIC.

1. You are not to memorize the research report.
2. You are not to read this oral report.
3. You may use notes, but they should be limited.
4. You may use the blackboard or overhead projector, if you wish.
5. THIS ORAL REPORT WILL BE COUNTED AS A REGULAR THEME GRADE.

EVEN WHEN YOU ARE NOT GIVING A SPEECH, YOUR ATTENDANCE IS MANDATORY, AND AN ACT OF COURTESY TO THE SPEAKER.

A FEW MINUTES WILL BE USED AFTER EACH PRESENTATION FOR MEMBERS OF THE CLASS TO ASK QUESTIONS OF THE SPEAKER. OBVIOUSLY, YOU DON'T NEED TO WORRY ABOUT KNOWING EVERYTHING ABOUT THE SUBJECT.

## WRITING AN ESSAY

I. Choose and limit subject

II. Develop a thesis sentence

- A. The thesis sentence or thesis statement is to an essay what a topic sentence is to a paragraph.
- B. The thesis statement serves as an overall direction your essay will take.
- C. The thesis cannot be in the form of a question.
- D. In summary, the thesis statement is the one main point that your paper will develop and support.
- E. It is placed before your outline on the front page.
- F. It will appear again in your introduction (usually at the end) or in your conclusion.

III. Write Outline to support your thesis, using major and minor supports

- A. May be in topic, sentence or paragraph form
- B. Consistency in form - do not combine
- C. Follow this standard outline form:

- I.
  - A.
    - 1.
    - 2.
  - B.

- II.
  - A.
  - B.
    - 1.
    - 2.

A CHECKLIST FOR PREPARING THE RESEARCH PAPER

	DATE DUE	DATE COMPLETED
<u>TOPIC</u> Does the subject meet the criteria of the assignment? Has the subject been approved by the instructor?		
<u>OUTLINE</u> Has the thesis statement been written? Is the outline form correct? Does every item in the outline relate directly to the thesis statement?		
<u>TEXT</u> Does everything in the paper show a direct relation to the subject? Is the paper well organized? Is the grammar (sentence structure, spelling, punctuation, and so on) correct?		
<u>DOCUMENTATION</u> Are all sources of information made clear to the reader? Are footnotes in the proper form? Are all footnotes coordinated numerically with the text?		
<u>BIBLIOGRAPHY</u> Have enough sources of information been used? Have scholarly materials been used? Are both books and periodicals represented? Is bibliographic form correct? Is the form of annotation correct?		
<u>PRESENTATION FORM</u> Is the title page complete? Has the paper been given a final proof-reading to guard against typographical errors? Are all illustrations, graphs, charts, and so on labeled? Are all quotations typed in the proper forms? Are all the pages securely fastened together?		

### UNIT III: LORD OF THE FLIES

#### DESCRIPTION OF THE UNIT:

This unit is designed to be a break from the heavy work assigned in the first two units. Students read and discuss William Golding's novel, Lord of the Flies, and compare it to Peter Brook's film adaptation.

Students are given a series of study questions on the novel to think about and to prepare to discuss in class.

They view the film and hear three lectures: one on Golding's point of view, one on the form of a critical review and the third, a guest lecture, on the art of writing a critical review by a local movie critic. A copy of the course outline and study questions follow.

Time: 9 hours

#### OBJECTIVES:

1. To balance the study of disciplines in this semester by studying a novel.
2. To study a novel which uses a lot of symbolism.
3. To study a film adaptation of a novel for comparison/contrast.
4. To help students continue to develop essay-writing skills.
5. To study a work recently in the news, i.e., a recent Nobel Prize winner.
6. To give students exposure to speakers from outside the staff.

#### CONTENT:

Lord of the Flies by William Golding, Casebook Edition, New York: Wideview, Perigee, 1954.

"Lord of the Flies," a film adaptation by Peter Brook, Director, and Lewis Allen, Producer, 1963. (Available from Bruce Webster, Oklahoma City, OK).

#### COMPETENCIES DEVELOPED:

#1, 2, 3, 4, 5, 7, 8, 9, 13, 17 & 18.

#### TESTING/EVALUATION:

At the end of the unit, students are asked to write a 750 word paper. The subject of the paper is "Was Peter Brooks' film adaptation of Lord of the Flies accurate?" Students are asked to select one aspect of the book, symbolism, irony, character development, etc. on which to focus. They are asked to stay within the word limit as this is an exercise in being concise and precise.

### UNIT III: COURSE OUTLINE

#### INTRODUCTION TO THE UNIT:

In this unit, students read William Golding's novel Lord of the Flies and view the film adaptation. When the unit is over they will write a critical review of the film. A critical review is not a fault-finding paper, rather the writer attempts to analyze, interpret, or evaluate a work. In the case of Lord of the Flies, they will analyze and evaluate how well the film makers translated Golding's novel to the screen. There are two interviews with Golding in the text in which Golding makes clear what he was trying to do in the book. The question, therefore, becomes: were the film makers responsive to the author's purpose, or were they not? And, if they were faithful to Golding's view, how well did they translate the novelist's intent into a visual medium?

Every attempt is made to equalize the students' experiences for this assignment. Granted, some of the students in the class know a great deal more about film technique than others. However, everyone has to read the book and view the film. The final essay will be in the words of Pirsig (from Zen and the Art of Motorcycle Maintenance), 'a reflection of the writer's understanding of Quality': 'In a sense', he said, 'it's the student's choice of Quality that defines him. People differ about Quality, not because people are different in terms of experience.' (pg. 224)

To help prepare for the essay, there will be discussion questions on the novel itself, lectures on Golding's view, the form a critical essay takes, and a lecture on the 'art' of writing a critical review by a Sentinel Star movie critic.

#### DAILY PLAN UNIT III/IDS 2104

##### Monday, February 27

Assignment for today: Read all of Golding's book, Lord of the Flies - Answer the discussion questions for Chapters 1-6 (pgs. 51-100).

9:00 - 10:15 A.M.	Alpha	Introduction to the Unit and Golding's Mythos
10:15 - 10:30	Break	
10:30 - 11:50	Beta	Go over discussion questions

##### Wednesday, February 29 (NOTE YOUR RESEARCH PAPER IS DUE TODAY)

Assignment for today: Answer discussion questions for Chapters 7-12 (pgs. 101-186), and read Keating and Kermode's interviews with Golding (pgs. 197-206).

9:00 - 10:45	Alpha	Film: <u>Lord of the Flies</u> - a break is scheduled during the film.
10:45 - 10:50	Break	
10:50 - 11:50	Beta	Go over discussion questions

##### Monday, March 5

Assignment for today: Read McCrimmon, "The Critical Essay" (pgs. 269-301).

9:00 - 10:00	Alpha	Lecture: The Form of a critical review
10:00 - 11:15	Alpha	Lecture: "Reviewing a film-is it just your opinion?" Guest from the Orlando Sentinel
11:15 - 11:30	Break	
11:30 - 11:50	Alpha	Questions and Answers



## LORD OF THE FLIES

### DISCUSSION QUESTIONS - PART I

Directions: Write out your answers - paragraph form - cite page numbers  
Students in BETA will be responsible for conducting the class discussion. BE PREPARED.

#### CHAPTER 1 - THE SOUND OF THE SHELL

1. Describe Piggy's and Ralph's appearance, what do you learn about them in Chapter 1?
2. What happens when Ralph blows on the conch shell? What is the significance of the shell?
3. Describe Jack Merridew and his 'choir.'
4. Describe Simon.
5. What do you learn about Jack when he finds a piglet caught in some creepers? What does he swear to do...the next time..?

#### CHAPTER 2 - FIRE ON THE MOUNTAIN

1. Do you sense any foreshadowing of a conflict between Ralph, Jack and Piggy? Explain.
2. On page 31, you read of the 'beast' - How is it described? Where is it?
3. How do they start the fire? What is its importance?
4. Why does Piggy lose his temper on page 40?

#### CHAPTER 3 - HUTS ON THE BEACH

1. Read the description of Jack that begins on page 43 - What image(s) comes to mind?
2. Why is Ralph (page 45) "surveying the wreck with distaste?"
3. In the context of the chapter, what does the statement "...they walked along, two continents of experience and feeling, unable to communicate (pg. 49)" mean?  
Re: Ralph and Jack

#### CHAPTER 4 - PAINTED FACES AND LONG HAIR

1. Why do you think Golding entitled this chapter as he did? What do you think of when you read the title? Why?
2. Summarize Golding's description of the 'rhythm of life that developed on the island'...(according to the)"...northern European tradition of work, play and food."

3. What is Jack's reaction to Piggy's idea about making a sundial? Is this reaction consistent with Jack's unfolding character? (pg. 59 ff) Why?
4. What happens when Ralph realizes that the signal fire is out? (pp. 62-65)? What is Jack's reaction?

#### CHAPTER 5 - BEAST FROM WATER

1. How does the narrator describe the Island and Ralph in the beginning of Chapter 5? Do you note a change in tone?
2. What does Ralph understand about Piggy's values?
3. What are Ralph's concerns about the fire and the shelters?
4. Summarize Piggy's argument to dispute the existence of...the beast (pg. 76ff)
5. Why, when Jack speaks out without having possession of the conch "...nobody minded"? (pg. 80)
6. What does Simon mean when - discussing the existence of the beast - suggests "...maybe it's only us." (pg. 82)
7. When Jack says, "Bollocks to the rules" and (pg. 84) goes on to give his reasons for ignoring the rules, would Machiavelli have agreed with Jack?
8. What does Piggy mean when he says to Ralph "...If Jack was chief, he'd have all hunting and no fire. We'd be here till we died." (pg. 85)
9. Why is Piggy scared of Jack? Why does Jack hate Piggy and Ralph?
10. What is the significance of the line "...We're all drifting and things are going rotten." (pg. 86)
11. What is ironic about Piggy's belief that all their problems would be solved if there were "...Grownups!" (there)? (pgs. 86 & 87)

#### CHAPTER 6 - BEAST FROM AIR

1. What is the "nature of the beast from the air"? (pg. 88-89)
2. What did Sam and Eric 'really' see (pg. 91ff)? Where is their description of the beast coming from?
3. What is Jack's reason for insisting that "...we don't need the conch anymore"? (pg. 94)
4. How does Ralph assert himself - once more as chief - before Jack and the boys (99-100)? i.e., what is his argument?

## LORD OF THE FLIES

### DISCUSSION QUESTIONS - PART II

#### Chapter Seven: Shadows and Tall Tree

1. Why are Ralph's plans for his toilet impossible? (p. 101)
2. Ralph asks Jack, "Why do you hate me?" How does Jack respond? (pp. 109-110)
3. What happens when Ralph, Jack and Roger see "the beast"?

#### Chapter Eight: Gift For The Darkness

1. What does Jack promise the boys who agree to join his tribe? Would Dostoevsky's Grand Inquisitor agree with Jack? Explain your answer.
2. How does Jack solve the problem of roasting the pig and keeping "the beast" appeased? (pp. 126-130)
3. Summarize the arguments the boys give Ralph and Piggy for wanting to join Jack's tribe. (pp. 131-132)
4. The Lord of the Flies speaks to Simon. What does he mean by the following statements, "You knew didn't you. I'm part of you...I'm warning you. I'm going to get angry..."? (pp. 132-133)

#### Chapter Nine: A View of Death

1. What does Simon discover about "the beast"?
2. What happens to Simon when he tries to tell the others the truth? (pp. 140-141)

#### Chapter Ten: The Shell and The Glass

1. Ralph and Piggy disagree over responsibility for Simon's death. Piggy says it is an "accident". Ralph says, "murder." Who is correct? Explain your answer. (pp. 143-146)
2. How does Jack use the other boy's fear of "the beast"? (pp. 147-149)
3. What does Jack's band steal from Piggy? Why? (p. 155)

#### Chapter Eleven: Castle Rock

1. What is the answer to Ralph's question, "Are we savages or what?" (pg. 157)
2. Why is Piggy's argument for the return of the glasses wasted on Jack? (pp. 156-158)
3. What happens when Ralph confronts Jack at Castle Rock? (pgs. 162-165)

#### Chapter Twelve: Cry of the Hunters

1. The cry of the hunters is "Kill the beast! Cut his throat! Spill his blood!" What beast does Jack and his tribe hunt in Chapter 12? Explain your answer.
2. Staggering from the bushes, Ralph sees a naval officer. Why does Ralph weep? Explain your answer. (pp. 186-187)

## LORD OF THE FLIES: WRITING A CRITICAL REVIEW

### RATIONALE FOR TOPIC:

Since students are not asked to write a critical review before, discussion of how to do this is in order.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet in the large group for a lecture/discussion on writing a critical review.

Time: 1 hour

### MAIN IDEAS STRESSED:

1. The assignment: Using a specific element of the novel, respond to the development of that element (or the lack of development) in Lord of the Flies as it was produced on film.
2. Elements to select from were:
  - point of view
  - characterization
  - symbols
  - irony
  - structure
  - situation
  - plot
  - dramatic conflict
  - theme
  - voice
3. The assignment requires that students analyze, evaluate and criticize. This criticism does not have to be fault-finding. To criticize means to separate, discern and choose.
4. The process of writing should involve prewriting. The prewriting should consist of: reading the book, seeing the film, selecting the element, and making notes.
5. The final paper should employ the TRIT structure.
6. The purpose of the paper is persuasion. It should be supported with evidence from both sources.

### REACTION/SUGGESTIONS:

The lecture/discussion goes well.

LORD OF THE FLIES: THE ART OF FILM CRITIQUING --  
MORE THAN JUST AN OPINION

RATIONALE FOR TOPIC:

A film critic for The Sentinel, the local Orlando newspaper, agreed to speak to the class. Having a guest speaker adds interest to the unit and contributes a unique perspective.

DESCRIPTION OF LEARNING ACTIVITY:

Students meet in the large group for the guest lecture. After the lecture, he answers their questions.

Time: 1 ½ hours

MAIN IDEAS STRESSED:

1. Students comprise the bulk of any movie audience.
2. Personal goals in writing a critique:
  - a. don't be afraid of your own reaction.
  - b. don't start analyzing too quickly.
  - c. try to get into the flow of the movie, react naively at first.
  - d. analyze your own reaction.
  - e. write down your reactions.
  - f. think more about the film later.
3. Objectives in writing a critique:
  - a. tell people simple things about the movie, i.e., plot, characters, style, other prominent features.
  - b. place the movie in relation to its subject, i.e., book, subject area, accuracy of detail, etc.
  - c. place the movie in context of other works by same director, same star(s), or in relation to other media.
  - d. think carefully about movies that are intellectually demanding.
  - e. state personal opinion and support with reasons.
  - f. write well. Try to be creative, thoughtful and entertaining. (avoid undeveloped mental images which don't communicate well).
4. Consider these areas when writing a critique:
  - a. artist's intentions
  - b. creator's interpretations
  - c. meaning in historical context
5. Keep in mind that there are specific problems in adapting a book to a film. These are:
  - a. the difference between film medium and print medium.
  - b. being faithful to book doesn't always make a good movie.
6. Keep in mind when writing this review not to over-react when asked for your opinion. Be sure to support everything you say with a thorough analysis. Mount a case for your opinion.

REACTION/SUGGESTIONS:

Students enjoy the lecture and ask many questions afterwards.

## UNIT IV: THE TAO OF PHYSICS

### DESCRIPTION OF THE UNIT:

Throughout Western intellectual history, developments in the sciences and mathematics have led the way for new philosophies. In our century, this is also true. The latest developments in physics are introducing new philosophical ideas into our patterns of thought. Since the 1970's, there has been a growing interest in the wisdom of the Orient, it is not a coincidence that some physicists have turned to the East to find metaphors for these new developments.

Fritjof Capra's book, The Tao of Physics, explores the latest developments in physics and draws parallels between these and the major Eastern religions. This book helps students to grasp these developments in physics and gives them the opportunity to learn about Oriental patterns of thought. The dual nature of the book is also a bonus. Students who are not usually interested in physics are carried along by the excellent discussions of the Eastern religions. Similarly, students whose only interest is science learn a lot about religion through this book.

The unit was organized to take advantage of the parallel structure of this book. Discussions of physics are given equal billing with discussions on religion. The introductions to the various religions were supplemented with excerpts from the religious texts. Students are asked to locate examples of the ideas presented in The Tao of Physics in the excerpts that they read. Responsibility for class discussion rests with the students.

The usual small group discussion and lecture/discussion format is augmented with several short films on the Eastern religions and several videotapes on science. This variety of media also helps hold students' interest. In addition, if one of the students is a Hindu, he/she can speak to the class about what Hindus believe.

During the unit, students are introduced to the "infamous" black box. This is a device which has become famous by word of mouth. Actually, it is a wooden cube, 12" on each side, which has two wooden handles protruding from opposite sides. It is painted black and when turned emits sounds from within. None of the staff knows what is in the black box, however, the students are charged with determining what is contained within its universe. The essay which they write at the end of the unit must explain the universe of the black box and how they came to know it. (a copy of the course outline follows.)

Time: 18 hours

### OBJECTIVES:

1. To study the latest developments in modern physics and their philosophical implications.
2. To study the major Oriental religions: Hinduism, Buddhism and Taoism.
3. To study some of the primary texts of the Oriental religions, including the Bhagavad Gita, the Upanishads, and the Tao Te Ching.
4. To help students continue developing their writing skills.
5. To give students an outlet for more creative writing and thinking through the Black Box Paper.

## CONTENT:

The Tao of Physics, Second Edition, by Fritjof Capra, Boulder, Colorado: Shabhala Publications, Inc., 1983.

Excerpts from Eastern religious texts including:

The Upanishads  
The Bhagavad Gita  
The Tao Te Ching

"The Flow of Zen", a film narrated by Alan Watts, Hartley Film Foundation.

"It's About Time", a NOVA program narrated by Dudley Moore.

"The Pleasure of Finding Things Out", a NOVA program about the physicist, Richard Feinmann.

## COMPETENCIES DEVELOPED:

#1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15, 16, 17 & 18.

## TESTING/EVALUATION:

At the end of the unit, students write a 1250-word paper describing the universe of the black box. They have to explain how they came to their understanding, what their understanding is and then relate that to three topics covered in this unit. One topic has to be scientific, one has to be religious, and the third can be either scientific or religious.

The paper is judged for its content, mechanics and for the creativity displayed in dealing with this subject.

## REACTION/SUGGESTIONS:

While students always find the physics a bit thorny, the discussions of the religions and the thinking they generate make this a very popular unit.

#### UNIT IV: THE TAO OF PHYSICS

Reading Zen and The Art of Motorcycle Maintenance, published in 1974, makes it clear that the mid 70's was a time when American writers turned eastward for viewpoints and metaphors which would make life more intelligible and more meaningful. The Tao of Physics by Fritjof Capra is another book written in that spirit. It attempts to explore the "parallels between modern physics and Eastern mysticism". Hopefully, the study of this book will give both an overview and introduction to developments in modern physics and an indication of how these developments are paralleled in Eastern religions. During this unit, students have a chance to read and discuss some of the ancient Oriental texts. Each day's reading assignment also includes a specific direction for preparing for class. Especially in discussions of Hinduism, Buddhism and Chinese Thought, students will be expected to bear the responsibility for Beta discussions. The IDS Staff will act only as moderators and/or peer participants. Therefore, if it's boring it's their fault!

At the end of the unit, students will write a paper which will reflect their knowledge of the material studied. Here are typical directions:

#### ESSAY ASSIGNMENT:

Describe the universe of the Black Box. Explain how you came to know that description and relate that description to three of the main topics covered in The Tao of Physics. One topic must be scientific, i.e., a development in modern physics. One topic must be religious, i.e., a facet of Eastern Mysticism or of a particular Eastern religion. The other topic may be either scientific or religious.

Your paper should be at least 1250 words and should contain specific references to the book. (It may also contain references to the handouts.)

This paper is due no later than Friday, March 30th at 1:00 P.M.

Your essay will be judged on its clarity and coherence, the use of appropriate examples, the thoroughness of your description/explanation and the creativity you display in handling this assignment. In other words --- its blend of classic and romantic elements.

Wednesday, March 7 - Knowing and Seeing

Read: The Tao of Physics, pp. 1-82 (Chapters 1-4). Underline important points.

9:00	-	9:45	Alpha	Introduction to Unit IV and <u>The Black Box</u>
9:45	-	10:00	Break	
10:00	-	11:00	Beta	Discussion of reading assignment

Monday, March 12 - Hinduism

Read: The Tao of Physics, pp. 85-91 (Chapter 5) and handout "Hindu Scriptures." Outline the main ideas in Chapter 5. Find examples of these main ideas in the Hindu Scriptures.

9:00	-	9:50	Alpha	Lecture: Hinduism
9:50	-	10:30	Alpha	Guest speaker: What Hindus Believe
10:30	-	10:45	Break	
10:45	-	11:50	Beta	Discussion of Handouts



Outline the main ideas in Chapter 5 - find examples of these main ideas in the Hindu Scriptures.

Wednesday, March 14 - Buddhism

Read: The Tao of Physics, pp. 93-99 (Chapter 6) and handouts: (1) "Teaching of Buddha"; and (2) "From Early Buddhist Books." Outline the main ideas in Chapter 6. Find examples of these in the handouts.

9:00	-	10:30	Alpha	Buddhism: What the Buddha Taught
10:30	-	10:45	Break	
10:45	-	11:50	Beta	Discussion of Handouts

Monday, March 19 - Chinese Thought

Read: The Tao of Physics, pp. 101-126 (Chapters 7-9) and handout, "From the Tao Te Ching." Outline the main ideas in Chapter 7-8. Find examples of these in the handouts.

9:00	-	10:30	Alpha	Lecture: Chinese Thought
10:30	-	10:45	Break	
10:45	-	11:50	Beta	Discussion of Handouts

Wednesday, March 21 - Uncertainty and Relativity

Read: The Tao of Physics, pp. 130-187 (Chapters 10-12). Frame questions of clarification for Alpha discussion.

9:00	-	9:50	Alpha	Film: "It's About Time"
9:50	-	10:40	Alpha	Discussion of Chapters 10, 11 and 12
10:40	-	10:50	Break	
10:50	-	11:50	Alpha	Discussion of Chapters 10, 11 and 12

Monday, March 26 - Energy, Matter and Particles

Read: The Tao of Physics, pp. 189-245 (Chapters 13-15) and pp. 286-305 (Chapter 18 and Epilogue). Frame questions for both Alpha and Beta discussion.

9:00	-	9:50	Alpha	Film: "The Pleasure of Finding Things Out"
9:50	-	10:50	Alpha	Discussion of Chapters 13-15
10:50	-	11:00	Break	
11:00	-	11:50	Beta	Discussion of Chapter 18 and Epilogue

Wednesday, March 28 - BEGIN DUNE

Friday, March 30 - PAPER DUE!

## THE TAO OF PHYSICS: HINDUISM

### RATIONALE FOR TOPIC:

Hinduism provides many of the metaphors which can help in understanding modern physics. Studying the concepts Capra presents and seeing that these are derived from the Rig-Veda, the Upanishads and the Bhagavad-Gita helps students better understand both this religion and modern physics.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in the large group for a lecture/discussion of the main principles of Hinduism and for a talk by a fellow student on "What Hindus Believe." They then meet later in their small discussion groups to find examples of Hindu principles in the excerpts from the Hindu scriptures that they have been provided with. These activities help students master competencies #1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 15, 16, 17 & 18.

Time: 3 hours

### READING ASSIGNMENT:

Chapter 5, pp. 85-91, from The Tao of Physics by Fritjof Capra, Boulder, Colorado: Shambhala Publications, Inc., 1983.

Excerpts from Hindu scriptures including the Rig-Veda, Upanishads and the Bhagavad-Gita.

### MAIN IDEAS STRESSED:

1. First a list of main ideas is given that would be covered in the lecture. These are:

- \*Monism
- \*Brahman
  - Trimurti: Brahma, Vishnu, Shiva
- \*Atman
- \*Lila
- \*Maya
- \*Moksha
- Yoga

- \*Examples of these principles can be found in the excerpts from Hindu Scriptures.

2. The aim of Hinduism is the direct, mystical experience of reality.
3. This is a monistic religion.
4. Of the Hindu scriptures, the Vedas are the oldest. The Upanishads are the most philosophical and contain most of the principles of modern Hinduism. The Bhagavad-Gita is the story of the god, Vishnu, and the warrior Arjuna.

5. Brahman is the one, undifferentiated reality. It is the world soul, the inner essence of all things. It exists within each individual as the atman.
6. Lila is the creative play of God becoming the world. Brahman is the name of the creator aspect of Brahman. (Vishnu, the preserver aspect, and Shiva, the destroyer aspect.)
7. Under the spell of lila, people fall into maya or illusion. The illusion of things keeps people from the truth. While Hindus recognize four legitimate aims in life: pleasure, success, duty and liberation, they believe that only the last, liberation, will fulfill the human and bring peace. Therefore, what men really want is moksha, liberation, because it brings Sat, Chit and Ananda or Eternal Being, Awareness and Joy.
8. The goal of yoga is the realization that the atman is Brahman, or "Tat tvam asi" ("That you are").

#### REACTION/SUGGESTIONS:

Students enjoy the lecture and discussing these concepts. They especially enjoy hearing from a Hindu.

## THE TAO OF PHYSICS: BUDDHISM

### RATIONALE FOR TOPIC:

Buddhism provides many of the metaphors which can help in understanding modern physics. Studying the concepts Capra presents and seeing that these are derived from the religious texts of Buddhism, as well as studying the life of Buddha, helps students better understand both this religion and modern physics.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in the large group for a lecture/discussion of the main principles of Buddhism and then meet later in their small discussion groups to find examples of these principles in the excerpts from Buddhist texts that they have been provided with. These activities help students develop competencies #1, 2, 3, 4, 5, 6, 7, 8, 13, 15, 16, 17 & 18.

Time: 3 hours

### READING ASSIGNMENT:

Chapter 6, pp. 93-99, from The Tao of Physics by Fritjof Capra, Boulder, Colorado: Shambhala Publications, Inc., 1983.

Excerpts from Buddhist writings.

### MAIN IDEAS STRESSED:

1. The story of Buddha's life is discussed. Especially stressed are the Four Noble Truths:
  - I. All existence involves suffering.
  - II. Suffering arises from desire.
  - III. Extinguishing desire eliminates suffering.
  - IV. The Eight-Fold Path is the way to extinguish desire.
2. Buddha's objections to Hinduism are:
  - a. its use of religious authority
  - b. its ritual
  - c. its metaphysics
  - d. its tradition
  - e. its determinism
  - f. its supernatural, magical elements

Buddha believed that all of these things kept people from experiencing religion directly.

3. The nature of Buddhism is discussed. Elements stressed are:
  - a. its empiricism
  - b. its emphasis on direct experience
  - c. its pragmatism
  - d. its therapeutic elements
  - e. its psychological insights
  - f. its democratic spirit
  - g. its individual orientation

4. Other elements of Buddhism which are discussed are:
- a. moderation
  - b. love
  - c. faith
  - d. compassion
  - e. unity of all being

REACTION/SUGGESTIONS:

Students always find Buddhism much more difficult to understand than Hinduism. The initial premise that all existence is suffering they find hard to accept.

## THE TAO OF PHYSICS: TAOISM

### RATIONALE FOR TOPIC:

Taoism provides many of the metaphors which can help in understanding modern physics. Studying the concepts Capra presents and seeing that these are derived from the Tao Te Ching helps students better understand both this religion and modern physics.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in the large group for a lecture/discussion of the main differences between Eastern and Western religions and to see a film, "The Flow of Zen" by Alan Watts. They then meet in their small discussion groups to find examples of Taoist principles in the excerpts from the Tao Te Ching they have been provided with. These activities help students master competencies #1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 15, 16, 17 & 18.  
Time: 3 hours

### READING ASSIGNMENT:

Chapter 7-9, pp. 101-126, from The Tao of Physics by Fritjof Capra, Boulder, Colorado: Shambhala Publications, Inc., 1983.

Excerpts from the Tao Te Ching.

### MAIN IDEAS STRESSED:

Students are asked to draw out the main principles of the Judaeo-Christian/ Islamic tradition by thinking about the Creation Account from "Genesis." They are asked to describe the nature of God, nature of man, nature of the earth, nature of reason, the nature of time and change and the purpose or meaning of life. Then they are asked to contrast the Western outlook with the Eastern outlook, and to examine these same elements in the religion they have been studying.

(Not much time is spent talking about Taoism itself since it has been discussed at length in Zen and the Art of Motorcycle Maintenance and students are already familiar with its main concepts.)

### REACTION/SUGGESTIONS:

Students enjoy the lecture which takes about an hour because they are active participants rather than passive recorders.

## UNIT V: DUNE

### DESCRIPTION OF THE UNIT:

This unit is organized around Frank Herbert's novel, Dune. Another novel is needed to balance the semester's content and to give students experience with critically analyzing a longer, more complex book than Lord of the Flies.

Since many of them are interested in science fiction, Dune seems to fill the bill nicely. It is an action-packed, fun-to-read book that also touches on many of the ideas dealt with during the program: arete, feudalism, capitalism, governance, adaptation to the environment, Eastern mysticism and determinism vs. free will --- just to name a few. The book is divided into four sections for purposes of class discussion. Each class is divided into two parts: small group discussions and a formal lecture. Students are responsible for preparing three points of interest to discuss at each small group discussion meeting. The topics of the lectures are: The Science Fiction Novel, The Economics of Dune, The Religions of Dune and The Mythos of Dune.

At the end of the unit, students are asked to write a paper analyzing the world of Dune through the eyes of one of the people studied throughout the two years. In this way, students can reflect back over all of the material covered. A list of possible topics is given to get them started. (A copy of this list and the course outline follow.)

Time: 12 hours

### OBJECTIVES:

1. To study a science fiction novel.
2. To critically analyze a long, complex fiction work.
3. To capitalize on students' interest in science fiction.
4. To have students reflect back over the material studied in the two years.
5. To provide a story of interest to counter-act the burnout that usually occurs at the end of this semester.
6. To continue helping students develop their critical reading, writing and thinking skills.

### CONTENT:

Dune by Frank Herbert, New York: Berkeley Publishing Corporation, 1965.

### COMPETENCIES DEVELOPED:

#1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 & 18.

### TESTING/EVALUATION:

At the end of the unit, the students submit an analysis of Dune done through the eyes of one of the people studied in this unit.

#### REACTION/SUGGESTIONS:

The students reaction to Dune is that they either love the book or hate it. The lectures are interesting but seem somewhat irrelevant in light of the assignment they are given. A suggestion has been made to change that format to a panel discussion format in which students will discuss various parts of the book from the point of view of persons studied in the program. For example, a panel discussion of the politics of Dune might be held with students representing Machiavelli, Marx, Locke, and Pericles. This might be more relevant to the assignment and more interesting to the students.



ASSIGNMENT: DUNE paper

In this unit (the last of the semester and the program), you are being introduced to the Science Fiction novel. The increasing popularity of science fiction and its slow but steady recognition and acceptance by college and university English departments as genre worthy of study and analysis, suggests that SF writers have something of interest and value to communicate. In the case of Frank Herbert, it is obvious that he is concerned about the quality of life, as well as intent upon telling a story. In Dune, Herbert creates a universe with an ancient history, ecological concerns, and political and economic currents affecting every inhabitant. He peoples his universe with villains, heroes and unnamed faceless masses who act and react according to their perception of reality. His characters are alternately selfish, evil, altruistic, curious, heroic, loving and foolish. The plot and the characters names, history, problems and delights should seem faintly familiar to you. Although thousands of years in the 'future', it is difficult to read about Paul Atreides, the Fremen, the Sardauker warriors and Baron Vladimir Harkonnen and not make connections with the philosophical, scientific and religious ideas discussed in IDS during the past two years. Therefore, upon completing this unit, your final examination (in the course) will be to interpret, analyze or evaluate the world described in Dune in light of one of the thinkers studied in the past two years. Here are some possible topics:

- How would Marx evaluate the economic conditions on Arrakis?
- How would Marx evaluate the Fremen's revolt against Baron Harkonnen?
- Would Luther (or Paul) agree with the plans and modus operandi of the Bene Gesserit?
- Is Paul (Muad' Dib) cast in the mode of a Homeric hero?
- Would Paul understand the values for which Pericles argued the Athenians were willing to die?
- How would Malthus, Adam Smith, Sartre, Skinner or Freud interpret the machinations of the CHOAM?
- In the never ending debate between determinists and indeterminists, does Dune provide support for one side or the other?
- William James argues for the pragmatic approval to ethical choices. Would anyone in Dune support his thesis for determining the societal good, and why?
- Nietzsche, through Zarathustra, cries, "God is dead," and praised the man who could stand alone against the herd. Would Nietzsche find Dune a 'satisfactory' work? Why?
- Would Plato's Theory of Knowledge and his dualistic view of reality be understood in the world of Dune?
- Are there any points of comparison to be found between Bach's Jonathan Livingston Seagull and Dune?

- Or between Golding's Lord of the Flies and Dune?
- Would Pirsig find "quality" in Herbert's world? Or would he see the same split between Romantic and Classic modes of knowing he found in Roseman, Montana in RAM?
- Would Einstein reject Herbert's world as 'impossible'?
- How would Newton view this science fiction world of the future in light of his Principia Mathematica?
- Would Galileo support the Fremmen's efforts?
- How would Malthus or Darwin interpret the life cycle of the Sandworms?
- Does the Tao have a place in Dune?
- Does a form of arete exist in Dune?

As you can see, the possibilities are endless. The only limits are the self-imposed ones of individual imagination and interest.\* The final essay will be written in class and should be about 750 words in length. You may prepare a rough draft at home, bring in a quote sheet and your Dune text. You will have two hours to write and edit your essay on the day the final exam is scheduled. All rules of grammar and rhetoric apply. Your essay will be graded on form and content. Creativity is encouraged, clarity and organization rewarded.

\*NOTE: MAKE SURE YOUR FINAL THESIS STATEMENT IS REVIEWED AND APPROVED BY YOUR BETA LEADER, SO YOU DON'T GO OFF AND TRY TO WRITE A 1,500-2,000 WORD THEME IN 750 WORDS.

DAILY PLAN: FRANK HERBERT'S NOVEL DUNE

Wednesday, March 28

Assignment: Read Dune, pages 1-148

Beta group members responsible for conducting the discussion.

9:00 - 10:15	Alpha	Lecture: The Science Fiction Novel
10:15 - 10:30	Break	
10:30 - 11:50	Beta	Discussion of reading assignment

Monday, April 2

Assignment: Read Dune, pages 149-256

9:00 - 10:15	Beta	Discussion of reading assignment
10:15 - 10:30	Break	
10:30 - 11:50	Alpha	Lecture: Economics in <u>Dune</u>

Wednesday, April 4

Assignment: Read Dune, pages 256-361

9:00 - 10:15	Beta	Discussion of reading assignment
10:15 - 10:30	Break	
10:30 - 11:50	Alpha	Lecture: Religions in <u>Dune</u>

Monday, April 9

Assignment: Read Dune, pages 365-490

9:00 - 10:15	Beta	Discussion of reading assignment
10:15 - 10:30	Break	
10:30 - 11:50	Alpha	Lecture: The Mythos of <u>Dune</u>

## DUNE: PART I

### RATIONALE FOR TOPIC:

As stated in the Unit Plan, this book is selected to give the students exposure to a science fiction work, to the critical analysis of a longer, more complex literary work, and as fun.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in small discussion groups to discuss points of interest they have identified in Dune. The staff moderates, but does not lead, these discussions. They then meet in the large group for a formal lecture on the science fiction novel. These activities help students master competencies # 1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17 & 18.

Time: 3 hours

### READING ASSIGNMENT:

Pages 1-146 from Dune by Frank Herbert, New York: Berkeley Publishing Corporation, 1965.

### MAIN IDEAS STRESSED FROM THE LECTURE:

1. Science fiction means scientific ideas in a fictional setting.
2. It was considered a "sub-genre" but is rapidly becoming a genre, an independent category of literature.
3. One definition is "... (the) search for a definition of man and his status in the universe which will stand in our advanced but confused state of knowledge and is characteristically cast in the Gothic or Post-Gothic mode."
4. Science fiction shows man confronted by crises which often represent archetypal fears. (Discussion is held of some of these archetypal fears from Dune.)
5. A short history of science fiction is given.
6. One of the students, who is a science fiction buff, can talk about different kinds of science fiction and discuss examples of books in each category.

### REACTION/SUGGESTIONS:

Students enjoy the class discussion and respond well to helping direct it themselves.

## DUNE: PART II

### RATIONALE FOR TOPIC:

As stated in the Unit Plan, this book is selected to give students exposure to a science fiction work, to the critical analysis of a longer, more complex literary work, and as fun.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in small discussion groups to discuss points of interest they have identified in Dune. The staff moderates, but does not lead, these discussions. They then meet in the large group for a formal lecture on the economics of Dune. These activities help students master competencies #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 & 18.  
Time: 3 hours

### READING ASSIGNMENT:

Pages 146-255 from Dune by Frank Herbert, New York: Berkeley Publishing Corporation, 1965.

### MAIN IDEAS STRESSED FROM THE LECTURE:

1. The ecology of Dune is important to its economics. Herbert may have been inspired by the Ecology Movement of the 1960's since many of the ideas of this movement are utilized in the book.
2. Perhaps the premise of Dune is, "What would happen to Earth if we raped the planet?"
3. Herbert's outlook might be characterized as "Marxian" since economics dominates life on Dune and dominates the structure of the book.
4. Of interest to economists in looking at Dune are:
  - a. the properties of the spice, melange; and
  - b. the lack of water
5. All economic relationships are basically demand relationships. All demand curves share the same downward slope.
6. The "satiation principle" is the cause of the slope of the demand curve.
7. In the ecology of Dune, water is also governed by this demand curve. (Water was one substance omitted from Adam Smith's valuations because he could never conceive of the lack of water.)
8. The interaction of the demand and supply curves determines the price.
9. Water on Dune is so scarce that price is extremely high. There is an inelastic demand.
10. Spice also has an inelastic demand because of its addictive properties.

11. The environment on Dune is such a harsh one that people are willing to pay an almost infinite price for either substance.
12. The relationship between the worms and the spice and between the worms and water govern the economics of Dune.
13. This economic relationship gives rise to an interesting political situation. It is a good example of Jefferson's statement, "Power corrupts and absolute power corrupts absolutely."
14. Discussion of the balance of power on Dune. The elements involved:
  - a. Emperor Shaddam IV
  - b. Baron Von Harkonnen
  - c. Duke Leto Atreides
  - d. the Fremen
  - e. the Imperial Planetologist, Liet Kynes
15. Finally, Herbert poses the question -- "Is the environment the real determiner of human values?"

REACTION/SUGGESTIONS:

Students enjoy the class discussion and respond well to helping direct it themselves.

## DUNE: PART III

### RATIONALE FOR TOPIC:

As stated in the Unit Plan, this book is selected to give the students exposure to a science fiction work, to the critical analysis of a longer, more complex literary work, and as fun.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in small discussion groups to discuss points of interest they have identified in Dune. The staff moderates, but does not lead, these discussions. They then meet in the large group for a formal lecture on the religion of Dune. These activities help students master competencies #1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17 & 18.

Time: 3 hours

### READING ASSIGNMENT:

Pages 255-362 from Dune by Frank Herbert, New York: Berkeley Publishing Corporation, 1965.

### MAIN IDEAS STRESSED FROM THE LECTURE:

1. The last novel in this series, Heretics of Dune, resolves the questions that arise about the religions of Dune.
2. The Oxford English Dictionary defines religion as "...the recognition of a superhuman, controlling power and especially a personal god entitled to obedience."
3. The role of the Bene Gesserit is to plant the seeds of messianic promise, the idea of a savior from the wilderness.
4. However, they are callous in their manipulation of CHOAM, the Emperor and the Dukes of the great houses. Does Herbert believe as Freud did that religion is an invention of man?
5. Herbert presents the idea of individuality and free will vs. obedience and subserviency. According to the Baron von Harkonnen, fear is the significant force operating in the universe.
6. Hope is a function of all religions and is present in Dune. (See pp. 501, 503, 504, 506)
7. Examine the paradoxical nature of the quotes from the O.C. Bible.
8. What role should guilt play in a religion? How do the Fremmen discharge guilt?
9. Is Heidegger's world populated by Fremmen?

10. Religious themes present in Dune:
- a. Garden of Eden
  - b. predestination
  - c. rebirth
  - d. prophets and prophesy
  - e. the Wilderness
  - f. the Promised Land

REACTION/SUGGESTIONS:

Students enjoy the class discussion and respond well to helping direct it themselves.



## DUNE: PART IV

### RATIONALE FOR TOPIC:

As stated in the Unit Plan, this book is selected to give the students exposure to a science fiction work, to the critical analysis of a longer, more complex literary work, and as fun.

### DESCRIPTION OF LEARNING ACTIVITY:

Students meet first in small discussion groups to discuss points of interest they have identified in Dune. The staff moderates, but does not lead, these discussions. They then meet in the large group for a formal lecture on the mythic elements in Dune. These activities help students master competencies #1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17 & 18.  
Time: 3 hours

### READING ASSIGNMENT:

Pages 365-512 from Dune by Frank Herbert, New York: Berkeley Publishing Corporation, 1965.

### MAIN IDEAS STRESSED FROM THE LECTURE:

1. In Zen and the Art of Motorcycle Maintenance, Pirsig introduces the mythos vs. logos argument. The logos is the sum total of rational constructs held about the world, while the mythos is that collective, intuition of the world which is pre-logos.
2. Mythos transformed into logos maintains civilization.
3. New perceptions rising out of the mythos produce changes in the logos. (This is the kind of transformation that Capra and Pirsig both address. Golding shows what happens when the logos cannot be maintained.)
4. Herbert extends his personal vision of the future. This is what each student should be doing now, deciding what his personal vision of the future is and planning a philosophy to implement that future.
5. Students are moving into a world where they will have to answer questions like those raised by Herbert.
6. IDS provides students with a number of personal mythologies from which they can forge one of their own.
7. Dune is a mythology whose boundaries are the galaxy. It has:
  - a. technological proficiencies (the Butlerian jihad slowed a run-amuck technology)
  - b. the idea that humans are part of a larger plan
  - c. that there are direct consequences of human arrogance.
8. The problems on Earth are no different from the problems on Dune.
  - a. Messianic hope
  - b. Savior syndrome
  - c. Physical survival vs. psychic survival
  - d. History -- whose history?

REACTION/SUGGESTIONS:

Students enjoy the class discussion and respond well to directing it themselves.

# **APPENDIX**

## **Student Papers** from the **Interdisciplinary Studies Program**

The following student papers represent the type and variety of evaluations that students are required to do in the Interdisciplinary Studies Program.

The introduction to Part I of the teacher's guide contains the competencies that are stressed in this program and these competencies are marked in the student papers.

The first nine competencies are basic to clear writing and understanding and are emphasized in almost every activity in this program. As the program moves into Semester II, III, and IV, the level of difficulty is increased, therefore only those competencies that present something new or more difficult will be marked in those papers.

The evaluation activities in Semester IV ask for more individual creative expressions. Therefore instead of marking specific competencies, a number of student papers are included on each unit covered to show the varieties which are possible on a particular subject.

Page numbers in some parts of this manual are cross-referenced to the first edition of the Valencia Community College texts rather than the current edition of these texts.

Quality and the Art  
Of Eating a Banana Split

Quality is an elusive concept. It is ignored by many, understood by few, and simply never considered by the rest. Quality is an understanding, an intangible, an attitude one can or cannot display toward events, objects, people, relationships, toward anything. Quality is perfection. Not just perfection when it has been reached, but quality is the approach to perfection, an action with a goal of excelling beyond the ordinary.

Long before reading Robert Pirsig's novel, Zen and the Art of Motorcycle Maintenance, I had developed my own understanding of quality and had based many of my decisions and actions on my own version of quality, i.e. perfection, 'the best'. I applied my understanding of these to many kinds of decisions, some major, some minor; few understood by the class of people who ignore quality.

Major decisions reflecting my understanding of quality include my reasons for divorce, my reasons for abandoning the religion of my childhood, and my reasons for acquiring a higher education.

The underlying reason for most divorces is an inner conflict over this difference of quality. Most blame divorce on results of the conflict, but in actuality it is generally the quality of the money problems, the quality of the sexual problems, the quality of the sensitivity, and so on, that are the major chasms between divorcing couples. My divorce was not based on any of these. My divorce was solely because the quality of our expectations grew apart. We wanted different things. Not literally different, but the degree of what we wanted, the essence of the quality in the things wanted, was so disparate that no bridge could be built between the two expectations. The same gulf appeared in my family's religion. They wanted different things from religion and their faith in God than what I expected. God no longer provided me with quality. I had expectations not being fulfilled by believing blindly and devotedly in a power greater than myself. Education is also a highly personalized area where quality does not mean the same to any two people. My education is not to justify a scholarship or to fulfill a parent's dream. It is not to save mankind or make a contribution to the world. My education is not to maintain a certain grade level. All these things would be answering another's expectations. I answer my own. I want knowledge, I want perfection, I want to excel, be the best I can be. I want to 'be' in a way few people attempt to understand.

Minor attempts at reaching quality, and thus living my definition and understanding of this elusive intangible, is apparent in my recent endeavor to bake a carrot cake for a friend's wedding. Here, another aspect of quality comes into focus. That aspect is judgement. Quality can never be the same to any two people. It is personalized, internalized, and directly reflects the individual's scope of the ordinary. I base my judgement of quality on the attributes of performance and not just on the goal itself. The means must justify the end. The carrot cake was baked to moist, rich perfection. All six layers were filled with cream cheese frosting, tiered, and decorated with butter cream frosting; five layers of borders, roses, bells, lace, the works. Perfection. Beautiful, Quality. Review of the after mess, however, revealed a full pound of 4x sugar omitted from the cream cheese mixture, and one third stick instead of one third cup of butter used in each of six batches of butter cream. Disaster. There is no quality in this cake.

~~It does not meet the requirements of the recipe and is not in harmony~~ with my expectations, nor will the end result, in my judgement, taste perfect. However, the bride and guests judge it wonderful, delicious, beautiful. It meets their expectations. My judgement on the quality of this cake goes completely unnoticed. Therefore it reinforces to me that quality is highly personalized from one's own frame of reference. Two different interpretations of quality can be observed in the same object.

When Pirsig begins discussing 'a' definition for Quality in his novel I felt an inner conflict growing. I already knew my definition for quality and did not see how it could totally relate to anyone else's understanding. The main theme of the novel centers on the Narrator's aim to reconcile the split in attitudes of the western world. It was the reconciliation of the classical and romantic attitudes which was necessary for Quality to be understood and thus defined. Through the narrator's chautauquas he sought to reach enlightenment and push aside preconceived ideas.

The two modes of understanding presented roadblocks to the narrator's conception of Quality. After learning about the classical and romantic modes of thinking, these two modes cast shadows on my perception also. I have always had an either/or attitude regarding most things. I would either take an empirical approach and process facts logically and reasonably or berate myself for dealing another time in a subjective manner, allowing prejudice and my personal feelings and opinions to enter the mental process. Now I realize it is best to combine the two attitudes and perceive an overall application instead of individual segments.

The same principle applies to eating a banana split. As a child I always ordered banana splits sans banana, then proceeded to eat the individual flavors of ice cream, one at a time, in a linear pattern from one end of the dish to the other. This accomplishes as much as does thinking purely objectively or purely subjectively:

one never sees with overall 'Quality' understanding, and one never tastes the banana split. At some point in my life, I forced myself to order the banana with the banana split. Gradually I even learned to eat a bite of strawberry, then a bite of chocolate, a spoonful of whipped cream, then another bite of strawberry, and so on. Then, and only then, was I truly tasting a banana split. Just as the banana split sans banana caused me conflict (as well as strange looks from waitresses), I am sure the conflict engraved in my mind by Pirsig's chautauqua concerning the classical/romantic attitudes will take me years to sort, and sift, and solve.

It is after digesting so many new ideas that I feel I approach what Pirsig calls the zero moment of consciousness. Stuck. In advice to Chris, who cannot think of what to write in a letter, the narrator says, "usually, I say, your mind gets stuck when you're trying to do too many things at once. What you have to do now is separate out the things and do them one at a time." First reaction to this statement is 'easier said than done', however I now realize how crucial an element this is to achieving quality. Overcoming stuckness means first recognizing it. And then the narrator says, "We should keep our mind a blank tablet which nature fills for us, and then reason disinterestedly from the facts we observe." In the past, if I couldn't achieve quality I simply abandoned my search for it and looked elsewhere, i.e. my divorce, rather than digging beneath the stuckness and loosening my preconceived notions.

By now, Pirsig has put my way of thinking through the food processor on speed nine. My life has been a journey with no map and no concern of where I'm going, only with what I am when I get there. After reading one of the last of the narrator's chautauquas, I understand why I jump from one search to the next and enjoy the jumping. It is the mythos/logos conflict. For the most part, I have kept myself in a mythos state of mind where I internalize my search for excellence and concern myself primarily with the journey to perfection: 'arete'. I see only the now. Marriage was not a goal to light the candles on a fiftieth wedding anniversary cake. Marriage was the journey and if I didn't like the trip I certainly wouldn't be content reaching that fiftieth cake. I also don't care about a deferred heavenly reward if I don't like how religion takes me there.

I now realize that logos, reason and truth, also has a time and place and sometimes life warrants arriving at an end intellectually through an impersonal mental process less concerned with how than with when. As Pirsig pointed out through the conflict between the narrator and the narrator's alter personality, Phaedrus, there must be a balance in the time and mental space between Quality and Truth. Quality, excellence, 'arete', without truth, and without an aim, cannot truly be appreciated or fulfilled.

Prior to Pirsig, I did not understand the split in my own understanding and tried to fit things into an either/or category, and

threw myself from one mode of thinking to another. Although I believe my definition of Quality has been reinforced, my application of quality has been altered. The changes, I feel, are apparent in this passage where Phaedrus is comparing his thinking with that of the Sophists who taught rhetoric in the days of Plato.

"Man is the measure of all things. Yes, that's what he is saying about Quality. Man is not the source of all things, as the subjective idealists would say. Nor is he the passive observer of all things, as the objective idealists and materialists would say. The Quality which creates the world emerges as a relationship between man and his experience. He is a participant in the creation of all things. The measure of all things..it fits."

In the narrator's final confrontation with Phaedrus, he sums up the frustration Phaedrus felt. It also sums up my frustration and perhaps will keep me from changing journeys so quickly or at least to understand the risks involved in changing airplanes in the middle of a flight.

"And if he doesn't get the answer he just drives and drives until he gets one and that leads to another question and he drives and drives for the answer to that...endlessly pursuing questions, never seeing, never understanding that the questions will never end. Something is missing and he knows it and will kill himself trying to find it."



## QUALITY

Quality is a very important concept in Robert Pirsig's novel, Zen and The Art of Motorcycle Maintenance, and in the life of every person today. The narrator of the book spends most of his life and devotes all his time trying to find out what this Quality really is. It gave him much trouble and ruined most of his life. His obsession with Quality caused all of his personal relationships to deteriorate, especially the relationship between him and his wife and son, Chris. However, he finally was able to come to grips with this concept of Quality and to get on with the rest of his life.

When studying Quality, the narrator came up with an important idea. He felt that everyone had their own version of Quality. After reading Zen and The Art of Motorcycle Maintenance, people become influenced by the narrator's idea of Quality and begin to come up with their own definitions of it. The following is my definition of Quality and how it was influenced by the narrator's ideas about Quality.

First of all, for a person to have Quality he or she must care about what they are doing. This was the problem with Technology. There was no relationship or caring between the manufacturer and his product. This was exemplified in the narrator's quote, "The real ugliness lies in the relationship between the people who produce the Technology and the things they produce,..." (p.261). If a person cares, he has Quality and if a person has Quality, he cares. The narrator portrays this in his quote, "A person who sees Quality and feels it as he works is a person who cares. A person who cares about what he sees and does is a person who's bound to have some characteristics of Quality." (p.247).

I agreed with the narrator when he began to discuss the positive and negative aspects of doing things while working with Quality. There are certain things that can propel a person to work with Quality and then there are things which frustrate the person, thus, causing him to lose Quality. Another aspect I agreed with that the narrator went over was gumption. "The greeks called it Enthousiasmos, the root of 'Enthusiasm' which means literally 'filled with Theos', or God, or Quality." (p.272). "Gumption is the psychic gasoline that keeps the whole thing going." (p.273). These two statements by the narrator help clarify what gumption is. A person who has Quality has this gumption. This gives the person an enthusiasm and if he has enthusiasm, he has Quality. Gumption propels the person and carries him forward. However, there are things that can cause a person to lose his gumption. These are known as gumption traps. The narrator discusses gumption traps in his statement, "Throughout the process of fixing the machine things always come up, Low-Quality things, from a busted knuckle to an accidentally ruined 'Irreplaceable' assembly."

These drain off gumption, destroy enthusiasm and leave you so discouraged you want to forget the whole business. I call these things 'Gumption Traps'. (p.224). He compares all these gumption traps to the work on his motorcycle. He gives examples of the different traps he or anybody else could fall into. The narrator feels there were two kinds of traps, the external traps and the internal traps. The external trap consists of the parts trap while the internal trap consists of value traps, ego traps, anxiety traps, boredom traps, truth traps, muscle traps, and psychomotor traps. Each one of these traps in their own way can knock the gumption right out of a person and cause him not to care anymore. If a person can get around these gumption traps, live his life in the correct manner, he can begin to grow toward Quality.

I, like Pirsig, feel that people view Quality differently because people are different in their understanding of Quality. People differ in their background, knowledge or education and just basically understand things differently. The narrator discusses this in his third wave of crystallization. His statement, "People differ about Quality, not because Quality is different, but because people are different, in terms of experience." (p.224), exemplifies his belief in this. Quality is not different, but people are. Quality is one, but there is two different aspects of Quality. There is the romantic Quality which is concerned with the here and now. Romantics live for the present and nothing else. The other type is classic Quality. This type of Quality is concerned with the past, present, and future. This is portrayed in the narrator's statement, "Romantic Quality always correlated with instantaneous impressions. Square Quality always involved multiple considerations that extended over a period of time. Romantic Quality, was the present, the here and now of things. Classic Quality was always considered." (p.223). This statement brought the two Qualities together which would form all of reality. Quality is that which causes us to invent things that man calls his reality. Our environment causes man to create the world that he lives in. This is shown in the narrator's quote, "Quality is the continuing stimulus which our environment puts upon us to create the world in which we live." (p.225). Quality now becomes the source and substance of everything.

Finally, I believe that Quality is something that can deteriorate if not properly developed. People are taught to imitate others, they lose their creativity and Quality right along with it. This was demonstrated when Phaedrus was in his first phase of Quality. This was Quality in the classroom. He had noticed that his students were having problems with certain essay topics. The reason they were having problems was because they were taught to imitate or to repeat things they had previously learned. They had lost their creativity. However, Phaedrus was able to come up with

some specific topics that helped the students to see for themselves. He blamed this lack of creativity on the grading system and decided the grading system had to be destroyed. Therefore, he gave no grades for a semester. This statement describes his dilemma. "The students biggest problem was a slave mentality which had been built into him by years of carrot-and-whip grading, a mule mentality which said, If you don't whip me, I won't work. He didn't get whipped. He didn't work. (p.175) If a student had nothing to work for then he would not work. That is why he withheld all grades for the semester. Eventually, he learned that the bright, more serious student did better than the poorer student because the more serious student was interested in the subject matter. Withholding the grades caused his students to look within themselves. This is portrayed in Phaedrus' quote, "The real purpose of withholding the grades was to force them to look within themselves, the only place they would ever get a right answer." (p.180). He wanted the students to think for themselves because they would know what Quality was if they were only to look for it. The students who went by the rules would become lost, but those with a creative ability were able to produce something with their own personal Quality.

Therefore, I believe that Quality is caring and caring is Quality. Without caring there never will be a Quality. Also, I believe a person's Quality can be lost if they are not careful of certain traps. A person can be excited or have gumption but can have that gumption knocked right out of them if they are not careful. If a person can get around these traps he will be able to grow toward Quality. People, also, have their own versions of Quality. Quality is not different, but people have their own understanding of what Quality really is. Quality, also, causes man to create his reality or world. It is the source and substance of everything. However, if people are not careful they could begin to lose their Quality. If a person is not allowed to think for himself he will not know what Quality really is. A person must be able to come up with something that is Quality to him. Each person has their own definition of Quality and this was my version which happened to be influenced when reading Pirsig's, Zen and the Art of Motorcycle Maintenance.

THE PARALLELS BETWEEN  
"PLATO" AND "ABRAHAM MASLOW"  
IN VIEW OF HUMAN DEVELOPMENT

There are two theories on human development which are generally known and discussed today. These theories are Plato's "Divided Line" and Abraham Maslow's "Hierarchy of Needs."

I. Plato's Divided Line

- |    |                      |                       |
|----|----------------------|-----------------------|
| A. | Images               | World of Appearances  |
| B. | Visible              |                       |
| C. | Transitional period  |                       |
| D. | Mathematical objects |                       |
| E. | Forms                | World of Intelligence |

II. Abraham Maslow's Hierarchy of Needs

- A. Physiological
- B. Safety, security
- C. Belongingness, love
- D. Self-esteem
- E. Self-actualization

III. Parallels Between These Two Theories

There are two different theories on human development which are generally known and discussed today. These theories are Plato's "Divided Line", and Abraham Maslow's "Hierarchy of Needs." Plato (427?-347 B.C.) was a philosopher who wrote a dialogue, The Republic. Here he introduces his "Divided Line" theory of reality. Abraham Maslow (1908-1970) was a social scientist who speaks of his hierarchy of needs in his book, Motivation and Personality. Plato and Maslow both recognized hierarchies of human development as well as put them into a structured form.

Plato believed that there were four stages of cognition through which man passes in order to obtain a better life. These four stages are known as Plato's "Divided Line." Once successfully achieving these stages, man will reach the ultimate goal which Plato calls "The Good." Plato feels that the knowledge man obtains when he understands the principles that govern the universe, his life, and the objects around him constitute "The Good." "The Divided Line" theory of Plato is a hierarchy which divides cognition into four stages:

Now take a divided line drawn into two unequal parts, one to represent the visible order, the other the intelligible; and divide each part again in the same proportion, symbolizing degrees of comparative clearness or obscurity. Then one of the two sections in the visible world will stand for images. By images I mean first shadows, and then reflections in water or in close-grained, polished surfaces, and everything of that kind if you understand...Let the second section stand for the actual things of which the first are likenesses, the living creatures about us and all the works of nature

or of human hands...Now consider how we are to divide the part which stands for the intelligible world. There are two sections. In the first, the mind uses as images those actual things which themselves had images in the visible world; and it is compelled to pursue its inquiry by starting from assumptions and traveling, not up to a principle, but down to a conclusion. In the second, that the mind moves in the opposite direction, from an assumption up towards a principle which is not hypothetical; and it makes no use of the images employed in the other section, but only of Forms, and conducts its inquiry solely by their means<sup>1</sup>

The line is drawn horizontally, splitting reality into two worlds (philosophically speaking); these two worlds are the World of Appearances and the World of the Intelligible. The World of Appearances focuses its view on what the human can see, hear, and feel. This world has no means of justification since it relies only on the senses and empirical data. The World of the Intelligible is a world of formulas and laws which helps man understand the reality he lives in. Contained within these two worlds are four levels of knowledge which Plato believed are the levels which man passes through in striving for "The Good." Another way to represent this hierarchy is to draw the diagram Plato speaks of.

<sup>1</sup>Robert Paul Wolff, Philosophy, (Prentice-Hall, Inc., 1973), P. 29.

"The Good"

World of Intelligible	D. FORMS	Knowledge
	C. MATHEMATICAL OBJECTS	Thinking
<hr/>		
World of Appearances	B. VISIBLE OBJECTS	Beliefs
	A. IMAGES	Imagining

Each of the levels in this hierarchy includes not only a level of cognition but also sociological and psychological implications. The first and lowest level of the hierarchy in the Divided Line is that of images and symbols. When people fix a name to a specific object and this is accepted universally, they would usually call this knowledge; however, this cannot be knowledge because this is not formed by experience. For example, a newspaper, cup, or pencil have all been given such names so man can communicate reasonably. We call this labelling of such objects, conjecture. Plato states, "That the name given to the object would hold no value or meaning when not directly related to the object itself, this is called conjecture."<sup>2</sup> A conjecture is not based on knowledge or experience, but rather convenience; therefore, there are no reference points that can relate the word to anything real. However, when one views this aspect from a psychological standpoint, the word and the ability to identify creates this illusion that man has knowledge. When man has

<sup>2</sup> Interdisciplinary Studies Text, Volume I, Valencia Community College, Orlando, Florida.

created a word for convenience he merely gives an image which is accepted without any type of rational analysis. Plato feels that the people who live and act in a socialized manner on this level tend to believe everything they hear, and accept everything as true.

Plato's second level of knowledge deals with the object itself. This is the cognitive belief in visible things. When people look at and interpret them at their face value, then they are thought to participate at this level of knowledge. "This section for the common sense belief is the reality of the visible and the tangible called the substantial. In the moral sense it would include correct belief without knowledge."<sup>3</sup> When accepting traditional social practices and lives by society's rules one never tends to analyze the act, but accepts it as true anyway, due to the fear of rejection from the group. Plato feels that the people who live at this stage of life are usually happy with life as seen on the surface and never try to understand the underlying forms of life itself. As man begins to feel that he is a part of the world he lives in, he enters a psychological process, or transition period, which acts as a ladder between Plato's two worlds of reality. This process is where man starts to realize that all of the objects which are a part of him have a distinct reason for being there. It is here that man glimpses both worlds of reality. By rising out of the belief of images into a world of rational thought, man comes to understand that for every object

<sup>3</sup>Francis MacDonald Cornford, The Republic of Plato (Oxford University Press, 1945, first published in England 1941), p. 222 .



and event there lies a mathematical emphasis underneath its surface value.

As one enters the World of Intelligence, he begins to ask questions about things he does not fully understand. To answer his questions, he starts to develop cognitive skills and other techniques which aid him in finding the solutions to his problems. For example, when someone wants to know the meaning of a story or book, he will usually develop the technique of symbolic interpretation to solve his problem of not understanding the story. Man begins in his psychological mind to produce hypotheses to investigate his world; he usually will do this in some type of experiment. By taking a hypothesis and working out an experiment, man learns of life through the use of mathematical laws and scientific formulas, all of which is made possible by his ability to think rationally. Plato believes that man on this level uses experiments to find absolute outcomes. He states, "It is compelled to pursue its inquiry by starting from assumptions and traveling not up to a principle, but down to a conclusion."<sup>4</sup> He uses geometry as a prime example. When students do work in geometry, they start by using assumptions which are taken as known. The students will then rationally arrive at a conclusion by a series of consistent steps. Plato believes that man is socially better off at this level, rather than living in the visible world; however, this level still falls short of his ultimate goal, that of "the good."

<sup>4</sup>Robert Paul Wolff, Philosophy (Prentice-Hall, Inc., 1973), p. 29.

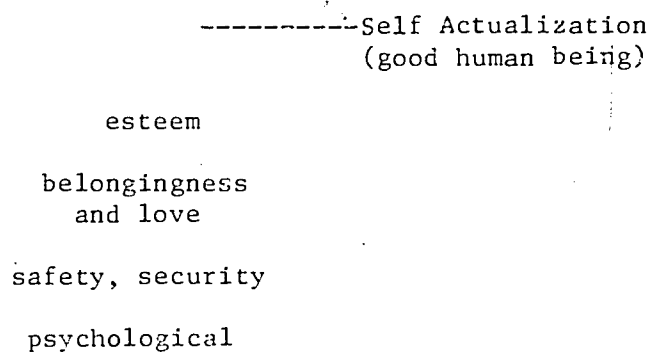
The last and most important level of Plato's line is that of perfect forms and principles which govern the scientific formulas of the previous level of thought. When people begin to psychologically probe or investigate the reasons behind their structural thought, they form what Plato calls a dialectic. This simply means a dialogue carried on by a questioner and answerer seeking to find the ultimate principle on which everything depends. This principle can be referred to as "The Good." "It is said that if the human mind should ever grasp the perfect form, it would then deductively confirm the whole structure of moral and mathematical knowledge."<sup>5</sup> "The Good", which is the motivating factor of human fulfillment, is located at this final level. This level shows both the psychological and the sociological fulfillments of line while also grasping the reasoning behind them. Once achieving this level of knowledge, Plato feels that here too shall man grasp the concept of "The Good."

Abraham Maslow also feels that man reaches one ultimate goal in his life, but only after achieving five stages of human development. Maslow's goal is known as self-actualization. He states, "What a man can be he must be, this need we call self-actualization; it refers to man's desire for self-fulfillment namely to the tendency for him to become actualized in what he is potentially."<sup>6</sup> This factor is what keeps man in a constant battle for the best, not only within himself but among others as well.

<sup>5</sup> Francis MacDonald Cornford, The Republic of Plato, (Oxford University Press, 1945, first published in England 1941), p. 223.

<sup>6</sup> Abraham Harold Maslow, Motivation and Personality, (New York: Harper & Brothers, 1954, revised ed. 1970), p. 91-92.

Maslow has developed a hierarchy of human development which emphasizes the need for psychological and sociological goals in life, which are made possible by man's ability to use cognitive skills in advancing towards a better life. Just as Plato put man's development into a structural form, Maslow has also structured these needs in such a way that when one need has been satisfied a new and higher need emerges. These connections are represented in the chart below:



Maslow feels that before reaching the highest level of this hierarchy, that of self-actualization, the human mind and body shall pass through the lower stages of achievements. The first stage which is necessary for survival is called the physiological needs. These needs consist of food, water, clothing, and shelter. Man needs these items to keep him alive and functioning; without them he becomes vulnerable to illness, and eventually, death. However, once these fundamental needs for survival have been met, man's psychological mind begins to explore towards advancing goals.

Maslow also sees this need of higher achievements and states,

"It is quite true that man lives by bread alone -- when there is no bread. But what happens when man's belly is chronically filled? At once other (and higher) needs emerge, and these, rather than physiological hungers, dominate the organism. And when these in turn are satisfied, again new (and still higher) needs emerge, and so on."

Man advances from this lowest level of needs to the level called safety and security needs.

Maslow describes safety needs as things like job security, good family, and close friends. At this level man begins to realize that somehow he is a part of this world in which he lives, and thus begins to adjust accordingly. In many cases, the need for safety can become a dominant mobilizer of a person's resources in the event of a crisis or an emergency. Maslow feels that humans can meet these needs through some type of religion or philosophy. Once these needs have been fulfilled, there is a higher need to be focused on; however, many people do not find it necessary to advance any further in life. Maslow states, "The healthy, normal, fortunate adult in our culture today is largely satisfied in his safety needs."<sup>8</sup> Although many people are psychologically happy at this level in life, there arises a sociological need which can only be fulfilled by advancing to the next stage of Maslow's hierarchy: that of belongingness and love. "Once the safety needs have been met there emerges yet

<sup>7</sup> Abraham Harold Maslow, Motivation and Personality, (New York: Harper & Brothers, 1954, revised ed. 1970), p. 83.

another set of needs, those of belongingness and love."<sup>9</sup> This new set of needs plays an important role in being socially accepted in man's society.

Belongingness and love can best be described as the emotion you feel when a wife, child, or close friend is absent. When a person is away from someone close to him, he begins to feel lonely and depressed, and only by being united with that person will the loneliness stop. Once a person has developed a sense of belongingness and love in the home and with his psychological realm, Maslow feels that this same person will become interested in socializing. Maslow states, "He will hunger for affectionate relations with people in general, namely for a place in his group, and he will strive with great intensity to achieve this goal."<sup>10</sup> When man is accepted by his peers, he feels secure and has a lesser chance of failure due to his insecurity. Many people find it comfortable living at this level; however, there are always those people who find it necessary for advancement in life.

Maslow saw this need and proceeded to list a fourth level of human development. These need he called self-esteem. "In so far as the belongingness and love needs are satisfied, the next class of needs to emerge are the esteem needs."<sup>11</sup> The need for esteem has been shown to be very important to a person who needs a great

<sup>9</sup> Abraham Harold Maslow, An Intellectual Portrait, (Viking Press, 1971), p. 26.

<sup>10</sup> Ibid

<sup>11</sup> Abraham Harold Maslow, Motivation and Personality, (New York: Harper & Brothers, 1954, revised ed. 1970), p. 89.

deal of self-confidence to function in reality. All esteem needs base themselves on one's higher evaluation of one's self. There are two characteristics of esteem needs. They are listed as, "first there is the desire for strength, achievement, mastery and competition; second there is what we may call the desire for reputation or prestige...status, dominance, recognition, attention, and appreciation."<sup>12</sup> These two characteristics deal with man's opinion of himself, and the opinions of the others around him. Although many people strive to achieve honor and recognition in life it is not as easy to obtain as Maslow's first three levels of needs in human development. There are, however, those people who not only accomplish these needs, but also feel the need to advance higher in life and achieve Maslow's last stage of development, that of self-actualization.

This top level, Maslow feels, is what keeps man striving to better himself. This is the level of the motivating factor, self-actualization. To Maslow, self-actualization is the ability to understand two different concepts as if they were both only the synthesis of one understanding. During his many years of practice, there were two women who struck Maslow as unique and interesting. These two women, Ruth Benedict and May Werthemair, each had her own philosophy of life. Ruth viewed life as one would view a television show, without much interest in its origin. On the other hand, May would concern herself with the rela-

<sup>12</sup>Ibid., p. 90.

relationship between cause and effect. Maslow felt that these two different philosophies were merely parts of a universal whole. He states, "I realized in one wonderful moment that their two patterns could be generalized to fit one whole structure."<sup>13</sup>

It was this ability to use each philosophy to interpret one general concept that Maslow calls self-actualization. Maslow feels that once a person is able to use several different ideas to form one, he has then reached the level of self-actualization. Abraham Maslow interchangeably uses the term "good human being" as the ability to understand life by its underlying forms, rather than be conditioned by society rule.

When viewing Plato's lower level of images in light of Maslow's lower levels of physiological and safety needs, one can see distinct similarities in the knowledge obtained, beginning from a knowledge based on traditional practices which one never questions and ending with a logical explanation for one's actions. Both Plato and Maslow agree on the type of knowledge which is found at these lower levels. This knowledge is known as that of beliefs based on society rule. This knowledge is felt to be accepted as true without being tested as to its validity. Plato states, "It seems to be the wholly enlightened state of mind which takes sensible appearances and current moral notions at their face value."<sup>14</sup>

<sup>13</sup>Abraham Harold Maslow, The Farther Reaches of Human Nature, (New York: Viking Press, 1971,) p. 29-31.

<sup>14</sup>Thid n 155

Plato shows here that the level is only that of the moral majority or better yet, the conformists. He feels that the knowledge of these types of people is acquired only through the word of mouth; this can be related to what we know today as gossip. Maslow also feels that people on this level in life only learn what is generally accepted as true in his society. Maslow speaks of human knowledge as getting the same amount of output as there is input in any given situation. He states, "That the communication between the person and the world, to and fro, depends largely on their isomorphism (i.e., similarity of form and structure)."<sup>15</sup>

Although Plato and Maslow both agree on the common sense belief, which is achieved in the World of Appearances, they totally disagree on the sociological aspects which occur. Plato feels that humans who live on this level are not striving to become prestigious or socially accepted, but rather to have a good understanding of themselves, "True beliefs are sufficient guides for action but are insecure until based on knowledge of the reasons for them."<sup>16</sup> Plato here relates man's belief at this level to practical use in life, but according to Plato these uses are found to be impossible until he advances to the next level of knowledge. Maslow, however, feels that although humans are constantly striving for achievement, life at this level is possible; in fact a good amount live at this stage of life happily. This

<sup>15</sup>Francis MacDonald Cornford, The Republic of Plato, (Oxford University Press, 1945, first published in England 1941), p. 222.



shows that contrary to Plato, there is a possibility to live a happy life without ever knowing what the underlying forms of their lives really are.

Plato's World of Appearances and Maslow's higher lever of needs show strong similarities in reaching the ultimate goal; however, when viewed in sociological terms they differ on the means of which to achieve this goal. As it has been said before, Plato's ultimate goal of human nature is that of "The Good;" once man has reached this level, then and only then shall man understand the world in light of himself. Maslow also feels that the top of human needs and achievements is man's understanding of the world in relation to himself. Maslow refers self-actualization as "The Good human being," while Plato refers intelligence as "The Good", both show signs that man has developed a high opinion of himself and can then securely apply this knowledge to understanding the outside world.

Although Plato and Maslow agree on reaching the ultimate goal and also agree on what this goal should be, they differ on the personality traits which are a part of man's sociological background. These personality traits are those that are obtained in Plato's World of Intelligence and at Maslow's level of self-esteem and actualization. Plato feels that once man has reached "The Good," he becomes omniscient, thus giving man an outlook on life dealing with only himself and not taking others into con-

sideration. By doing this, man isolates himself from the group, for his beliefs are no longer similar to theirs. Maslow, however, feels that though man has reached a level of individual superiority, he will use this knowledge to become a major figure-head of a group. By this, man gains the knowledge of Plato's wise man but instead of keeping to himself, Maslow's "Good human being" shall interact in a social group; he will be well-rounded and well-adjusted for life's future complexities.

Although these two unique individuals, Plato and Abraham Maslow, lived and practiced their beliefs in two totally different time periods, one can see distinct parallels in their ways of thinking.

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IDS IV  
UNIT III  
STUDENT PAPER

A CRITICAL ESSAY ON THE EFFECTS OF COLOR IN THE FILM  
ADAPTATION OF WILLIAM GOLDING'S NOVEL, LORD OF THE FLIES

In William Golding's novel, Lord Of The Flies, there are approximately forty-eight young British school boys stranded on a tropical island. They are eventually rescued but, in the period of time between their arrival on the island and their departure from the island the boys go through a gradual transition. This change occurs soon after they begin to hunt for meat. These civilized British school boys become blood-thirsty savages and at the end of the novel, one of the boys finally realizes that the savage exists in everyone.

The film adaptation of Lord Of The Flies is faithful to the basic plot of the novel but, the transfer from the black and white on the screen into colors in the mind does not occur whereas, in the novel, Golding takes the time to describe and convert black and white words from the pages in the book into a colorful image in the mind. There are three prime examples.

In the novel Golding takes simple flowers and paints a magnificent picture in the mind of the reader:

The candle-buds opened their wide  
white flowers glimmering under the  
light that pricked down from the  
first stars. Their scent spilled  
out into the air and took possession  
of the island.(p. 52)

Golding creates an image of beautiful white flowers, gives them life, and then spreads their aroma over the island. In the film adaptation these same flowers are shown, but the effect is different on the person watching the film than the person reading the book because the scent is not carried through the film; whereas the importance of the scent is transferred from the book to the reader.

The second image that Golding creates is a group of pigs located on the island. He says, "The pigs lay, bloated bags of fat, sensuously enjoying the shadows under the trees." (p.124) The reader can place himself in the pigs' position and imagine that he is relaxing in the cool shade on a hot day doing nothing but, enjoying the shade. In the film this effect is lost, the person watching the film cannot see the pigs in the shade much less pull the feeling of coolness from it.

The third image Golding describes is an average day's weather and the boys' schedules due to this weather:

The first rhythm that they became used to was the slow swing from dawn to quick dusk. They accepted the pleasures of morning, the bright sun, the whelming sea and sweet air, as a time when play was good and life so full that hope was not necessary and therefore forgotten. Toward noon, as the floods of light fell more nearly to the perpendicular, the stark colors of the morning were smoothed in pearl and opalescence; and the heat as though the impending sun's height gave it momentum-became a blow that they ducked, running to the shade and lying there, perhaps even sleeping. (p.53)

Golding describes how the boys play in the morning when it is cooler and in the heat of the afternoon they retreat to the shade. In the film, the significance of this scheduled-out-like day is not effective. The film neglects to illustrate the coolness of the morning and the heat of the afternoon.

William Golding in his novel, Lord Of The Flies, creates vivid images in the mind which possess colorful and realistic features, where in the film adaptation there is not enough emphasis on color. The film maker makes an attempt only to get the story line across and thus neglects to focus on the important aspects of color.

Lord of the Flies: A Critical Review

A critical review based on the characterization of William Golding's novel, Lord of the Flies, and the film adaptation of this novel, reveals a faithful, clear, and precise interpretation and representation of Golding's character. In the novel, Golding introduces four main characters: Ralph, Piggy, Jack, and Simon. These characters are also introduced and developed in the film.

The first character introduced in the novel is Ralph. He is an English school boy who is described by Golding as a slim, but well-built, fair-headed boy, who is even-tempered and maintains a good disposition. In the novel, Golding says, "he might make a boxer, as far as width and heaviness of shoulders went, but there was a mildness about his mouth and eyes that proclaimed no devil." Ralph acts as one of maturity and becomes the leader of the marooned group of boys. He stands for a normal civilized life. Ralph is responsible for establishing a home base for the boys and he is bound to the goals of rescue and survival. He is in a struggle to establish some kind of rational order on the island and is the defender of civilized ideals. The film adaptation adequately represents Golding's concepts of Ralph. The viewer is able to see Ralph as one looking for order and civilization, as Golding expressed in the novel, through such scenes as the choosing of a leader, the calling of meetings, the making of rules, and the building of shelters. These scenes interrelate to express Ralph as a boy looking for and trying to maintain order in a world of chaos.

Piggy, the second character introduced by Golding, is as his name suggests, a fat boy. He is physically weak, having such medical problems as extremely poor eyesight, requiring thick lensed glasses, and asthma. Golding gives the reader Piggy's appearance through his conversation to Ralph, he says, "Can't catch me breath. I was the only boy in our school what had asthma, ' said the fat boy with a touch of pride. "And I've been wearing specs since I was three." Piggy is an intellectual, but he is often ignored because of his appearance and whimpy attitude. Piggy's character was excellently portrayed in the film in both aspects of appearance and attitude. The child was an exact replica of the description of Golding's Piggy. All the personal appearances were reproduced on film exactly as the reader had visioned them, from the fatness, glasses, and asthma to a whimpy type voice with an English accent which was

constantly murmbling something about "My Auntie said not to..." The intellectual ability of the child was also eloquently exemplified on film through such scenes as the starting of the signal fire, a symbol of intelligence, which could only be accomplished with Piggy's glasses, in turn symbolically suggesting that he was the only one who holds true knowledge. Piggy was also the one to give advice and warnings in later scenes regarding the proper course for survival and rescue.

Jack, the leader of the choirboys, is introduced by Golding as a contrasting personality against the leader, Ralph. Jack is seen by the reader as a bully whose prime concern is to be a hunter and soon develops into a savage being. Jack represents the bestial instinct of human beings and rejects Ralph's order and civilization and moves to his own world of primitive savagery. Golding makes Jack's appearance and behavior apparent when he says, "Jack, his face smeared with clays...hailed Ralph excitedly, with lifted spear. 'Look! We've killed a pig...'" The film representation of the novel thoroughly personified Jack's character. The film captured Jack's personality and character through scenes dealing with the hunt and rampage of the boys and the wild frenzy and the killing of the pigs. Jack and his followers lose all sense of civilized, controlled living. They regress to savage killing methods and ideals which are clearly developed and expressed on film. Jack and the hunters start the pursuit against the opposition, Ralph, and this results in chaos and total destruction of any civilized way of life.

The remaining main character of Golding's novel is a young fellow by the name of Simon. Simon is a very different type child than the rest of the boys. He sees the world in a poetic saintlike fashion. This concept is first exemplified in the novel by the way Simon sees plants and life on the island. He sees things for their beauty not in terms of purposes. Golding says, "Here they paused and examined the bushes around them curiously. Simon spoke first, 'Like candles. Candle Bushes. Candle Buds'...'You couldn't light them,' said Ralph. 'They just look like candles.' 'Green Candles,' said Jack 'We can't eat them. 'Come on.' " Simon represents a saint-like creature who appears only as a concerned individual for others, like the littluns. He comes to the understanding of the beast of mankind. Simon's character was appropriately demonstrated in the film. His saint-like actions were extremely well portrayed scenes in which light shining from above onto Simon surrounded by darkness helped to symbolize Simon's connections with God and Golding's concepts.

The film adaptation of the novel, Lord of the Flies, is an excellent representation of Golding's methods of characterization.

IDS IV  
UNIT III  
STUDENT PAPER

"A state of affairs or events that is the reverse of what was or was to be expected: a result opposite to and as if in mockery of the appropriate result" explains one aspect of irony according to Webster's Third International Dictionary. In William Golding's novel, Lord of the Flies and in Peter Brooks' film adaptation of this novel, this aspect of irony is represented by the choir boys. The choir, a formal representation of the Church of England and the guiding force for the British boys abandoned on the uninhabited island, implies the hope of strength, salvation, and leadership. By the end of the story it becomes apparent that instead of the saviour, the choir becomes the instrument of destruction, just the reverse of what is expected.

In his novel, Golding places subtle emphasis on the formal appearance of the choir as it marches on the beach toward the gathering of boys. Golding shows us something dark, in a haze, fumbling along the beach, which eventually takes the form of several boys clothed in black cloaks, long silver crosses, and caps with silver badges. They suddenly appear, gasping and sweating. In the film adaptation, Brooks has the black-cloaked choir marching, with a semblance of order, chanting the hymn, "Lord have mercy", and arriving with some dignity at the gathering of other boys. The book does point out that the other boys are "intimidated by this uniformed superiority and the offhand authority in Merridew's [the choir leader, Jack's] voice," however, the film version shows a stronger contrast between the two groups of boys. The choir arrives, fully uniformed, organized, singing in soft, sweet voices, only to find a chaotic assembly of boys in various stages of undress and noise.

The presence of such a pious group gives hope that order can be maintained until rescued from the island. Golding alludes to how this group of church boys were going to become the saving element when Jack agrees with the elected chief, Ralph, "We've got to have rules and obey them. After all, we're not savages, we're English, and the English are best at everything. So we've got to do the right things..Ralph, I'll split up the choir-my hunters, that is-into groups, and we'll be responsible for keeping the fire going--". This is also seen in the film as Brooks aptly portrays the choir as the providers of food, the bastions of the rules, and the sentinels who would draw the saving ship by their burning fire.

The irony begins to appear when the choir boys-turned-hunters place more emphasis on their actions than on their motivation. It begins in a small way with breaking of the rules. "Bullocks to the rules!" Jack shouts to the choir, both in the film and novel. "We're strong-we hunt!" But in the film, the irony in the film provides a sharp



contrast to the book. In the film, Brooks has the choir chanting the hymn in soft, sweet voices, or actually singing the words to the hymn, as they hunt or perform their treacherous deeds against the other boys. The strongest irony appears when the hunt is no longer for food but to kill Ralph, the chief of the boys, and the signal fire is no longer for rescue, but for destruction of not only Ralph, but also all the food and shelter provided by the island. "They have smoked him out and set the island on fire," Golding's novel tells us. Although Golding describes the frenzied chase of hunters and prey, the irony comes through more vividly in Brook's film because the chanting of the hymn promises salvation and the leadership eluded to through this constant reference to the 'church' is a mockery of the actual event taking place. The choir actually becomes the force behind the abolition of civilization on the island instead of the unifying force for good that Golding and Brooks would have us believe the choir has represented at the beginning.

In both Golding's novel and Brook's film adaptation, the irony of the choir representing good while performing evil, is apparent. In overcoming the limitations placed on any film producer to portray the storyline of a book (less words and less time), Brooks adeptly uses our senses to lead us to hearing the goodness of the choir while seeing the evil of the hunters. In this way, Brook's film adaptation transcends Golding's written words to provide a sharper overall look at the irony present in the novel, Lord of the Flies.

Alex in Wonderland

Alex was beginning to get very tired of sitting in Humanities class, listening to the lecture drone on and on. Outside the day was warm and flushed with the hazy glow of spring. Inside was air conditioning and words about dead people. His head was doing that droop and jerk that tired and drifting heads do when he saw, outside the classroom door, a very large White Rabbit stop and mutter, "Oh dear! Oh dear! I shall be too late!" The Rabbit then took a watch out of its waistcoat pocket, looked at it, and then hurried down the hall. Surely this was a fantastic thing that warranted further investigation. So Alex excused himself from the class and ran down the hall just in time to see the Rabbit exiting out the side door.

Alex too, went out the side door and there on the school lawn he saw a very peculiar thing (in addition to a White Rabbit in a waistcoat, which also is a very peculiar thing). He saw a square, black box that was about the size of an outhouse. It had no seams, or windows, or doors, yet incredibly enough the Rabbit, who had stopped in front of the box to check the time once again, seemed to step right through the wall and disappear!

Alex could barely believe his eyes, for as far as he could tell the walls were perfectly solid. The only thing that he could see on the face of the black cube was an inscription that read,

The Great Path has no gates,  
Thousands of roads enter it.  
When one passes through the gateless gate  
he walks freely between heaven and earth.

Alex didn't know what this meant, but he took it to be some sort of indication that this was the entrance and so he stepped through and fell...

How long he fell he could not tell for it was the sort of falling that is done in dreams: hours and minutes, far and near, all are the same thing.

When he stopped falling he was in a meadow on the bank of a river. The stopping wasn't accompanied by crashing or kaabooming or anything like that. He merely was no longer falling. He looked around and saw again the Rabbit just as it disappeared into a rather large hole. Immediately behind the Rabbit went a young girl with blond hair and red and white striped stockings. Alex too, would have followed, for he was baffled by these events, but the hole that the two had dropped into also disappeared.

Things were getting curiouser and curiouser. And since he did not see anyone that might be able to answer his questions he

began walking along the river bank to find someone who could.

That is how he happened upon the old Chinese man who was busy paddling his feet in the water.

Relieved to have found someone, Alex went up to the man and introduced himself: "Hi, I'm Alex."

The wise and venerable looking man continued to splash his toes in the river.

"I'm a bit confused," Alex continued. "Could you tell me what this," he waved his arm in an arc that encompassed the field and the river, "is all about?"

The old man must have misunderstood the question for he replied with a very queer answer.

"Nature can never be completely described, for such a description of Nature would have to duplicate Nature. No name can fully express what it represents. It is Nature itself, and not any part abstracted from Nature, which is the ultimate source of all that happens, all that comes and goes, begins and ends, is and is not."

"But to describe Nature as 'the ultimate source of all' is still only a description, and such a description is not Nature itself. Yet since, in order to speak of it, we must use words, we shall have to describe it as 'the ultimate source of all.'"

"If Nature is inexpressible, he who desires to know Nature as it is in itself will not try to express it in words."

"To try to express the inexpressible leads one to make distinctions which are unreal."

It seemed obvious to Alex that this strange old Chinese was not properly with what was being said. "I'm afraid you don't understand. I want to know where I am and how I got here... you know, what's going on?"

The old man chuckled so softly that Alex thought that it was the river gurgling.

"I understand you, Alex. It is you who are disconnected. My name is Lao Tzu and there is much to be learned before you will be able to find your way back to Here and Now. Please sit and listen."

Something in Lao Tzu's voice told Alex that here was a truth. He sat down, taking off his shoes and paddling his feet in the river as Lao Tzu opened the Gateless Gate.

"The best way," he began, "to conduct oneself may be observed in the behavior of water. Water is useful to every living thing, yet it does not demand pay in return for its services; it does not even require that it be recognized, esteemed, or appreciated for its benefits. This illustrates how intelligent behavior so closely approximates the behavior of Nature itself.

Whenever someone sets out to remold the world, experience teaches that he is bound to fail. For Nature is already as good as it can be. It cannot be improved upon. He who tries to redesign it, spoils it. He who tries to redirect it, misleads it."

Lao Tzu cupped his hands and brought up water from the river. "Consider water; nothing is weaker yet, for attacking what is hard and tough, nothing surpasses it, nothing equals it.

The principle, that what is weak overcomes what is strong, and what is yielding conquers what is resistant, no matter how paradoxical, is sound.

There was silence as both Alex and Lao Tzu listened to the changing yet unchanging river singing its song of rising and falling, of turbulence and stillness. Alex turned and asked, "Why do you tell me of these things?"

"I have a friend," said the old man, whom you may one day meet. His name is Hesse and he has very wisely observed that 'the true profession of man is to find his way to himself.' You are looking, I am a road sign."

"And where does the sign point?"

"Everywhere and nowhere," was the reply. "Ultimate reality is all-pervasive; it is imminent everywhere. All other things owe their existence to it and draw their sustenance from it, without anyone being refused. Having created and nurtured them, it does not demand title to them.

Even though it has provided for all, it refuses to dominate over a single one. Since it asks nothing in return for its services, it may appear as of little worth. But all things return home to it again, even though they do not know that they are being called home. Therefore it may be thought of as ultimate.

Since it never claims ultimacy for itself, it is, by that very fact, ultimate indeed.

With that Lao Tzu was gone, and with him the river and the meadow. Alex found that whereas he had been reclining on a river bank he was now sitting on the floor of a clean and sparkling metallic laboratory. All about him were people, some in pressed white coats, prodding this and poking that, measuring and classifying, and generally doing all sorts of very official looking things. Over in one corner, amidst all of this hustling and bustling, Alex was astonished to see a man who looked a great deal like Albert Einstein playing dice with the little girl with blond hair and red and white stockings who had been chasing the Rabbit.

"You must be Alex," said a voice from behind him. "Lao Tzu said you were coming. We've prepared everything as best we can. We work on probabilities here, you know."

Behind and over him was standing the owner of the voice who, in contrast to most of the others in the lab, was wearing a rather worn tweed jacket. He was an older gentleman and spoke with a Scandinavian accent.

"My name is Bohr. Niels Bohr. You are coming aren't you?"

Alex recognized the name from a Physics class. "The same Niels Bohr who discovered probability waves?"

"Well, ~~hmm~~, I'm quite flattered but I really didn't discover them, you know," Bohr replied. "H.A. Kramers, John Slater and myself actually invented them. We're all inventors here. We make things up. You see over there?" He said, pointing to a man with shoulder length hair, dressed in clothes several centuries out of date. "That's Sir Isaac Newton--he invented gravity. And over in the corner is Albert Einstein--he's responsible for creating relativity. Behind him is Martin Heisenberg. He likes to lay claim to the Uncertainty Principle, but between you and me I think uncertainty has been around a good deal longer than he has."

The idea of inventing, as opposed to discovering these laws, bothered Alex. "Mr. Bohr, from the way you talk it would seem to me that you men claim to be God."

"Why certainly not," said Bohr. "She's over there, shooting craps with Albert. Giving him a good thrashing too, from the looks of it."

While Alex was puzzling over these curious remarks and wondering if that was really God playing dice in the corner (after all a lot of very strange things were happening--who knows maybe it is God), Martin Heisenberg came over and handed Bohr a Twinkie with the words EAT ME on the wrapping.

Heisenberg said to Alex, "Alberts lost again, so it looks like it will be a tendency towards a particle."

"What ARE you talking about?" Said Alex.

"Lao Tzu said you were interested in the Ultimate Reality of things. Albert was shooting craps to see if the Ultimate Reality would be a particle or a wave today. ~~It's going to be a particle,~~" said Bohr, "rather a tendency towards a particle."

"I'm afraid I still don't understand."

"You're going for an Electron ride," chimed Heisenberg. "Of course we can't guarantee it will be a particle. But we can place you in a grouping that has a 60% chance of being particles. There is about an 38% chance they will be waves, and about 2% that they will be some kind of strange reality just in the middle between possibility and reality. That means the whole universe could turn into a Bluebird and fly away. Anything could happen."

"Quite," said Bohr, who had divided the Twinkie into three pieces, one for each of them.

"Shall we go?" And with that both he and Heisenberg popped pieces of cake into their mouths. Alex didn't see how things could get any weirder, so he did likewise.

Things got weirder.

He started to feel very queezy and the room was suddenly getting extremely small. Smaller and smaller until the three of them fell into the space that separates the atoms of the floor. They tumbled and turned and finally landed, none too gently, on to a spinning, vibrating Electron.

"We were right again," yelled Bohr as they whipped around what he explained was the nucleus of an atom. "It's a particle."

Alex looked around and saw that there were others riding Electrons on different levels.

"This always reminds me of the carnival," shouted Heisenberg, who was wearing an ear-to-ear grin. "All we need is some cotton candy."

Of course things going the way they were, there appeared cotton candy. All three sat upon the spinning Electron, quietly letting the cotton candy dissolve and watching the Universe roll by. It must have been the added energy from all that sugar for it wasn't long after the last of the candy was gone that the particle ZAPPED into a wave, transporting the three along at the speed of light.

"Whoopee!" shouted both Bohr and Heisenberg. As for Alex this unexpected transformation had more than a little terrified him. It seemed to him that everything else except Bohr, Heisenberg and himself was moving incredibly fast.

"That's Albert's invention," said Bohr. "At the speed of light objects appear two dimensional. Of course to them we appear two dimensional. You'll also notice that your watch has stopped."

"And what's that to our right?" He asked pointing to the gray veil beside them.

"That's the Unknown other. It's that which is beyond the speed of light. It gives Albert the heebie-jeebies so we steer clear of it to keep him happy."

How is it, thought Alex, that these supposed men of science could so casually engage in what most certainly appeared to be magic and superstition? A thing is a particle or a wave, depending on the roll of dice? A Universe in which anything is possible, regardless of cause and effect? This seemed to be in total opposition to science. He turned back to ask the two scientists about this, but they were gone. In their place was Lao Tzu. He said to Alex's unasked question.

"The tendency toward opposition is ever present. Opposition is the source of all growth. The principle of opposition is the source of all opposition. The principle of opposition is inherent in Nature, so oppositionness will continue forever, no matter how many opposites may come and go.

"In Nature, all natures originate, all conflicts are settled, all differences are united, all disturbances are quieted."

With that Alex knew of the unity of Here and Now. As he closed his eyes to meditate on that unity, a neutrino came speeding from outer space, keeping its appointment with the Electron wave which carried Alex. In the collision Alex fell off and to the right, tumbling into the Unknown Other...

Alex awoke as his head banged down upon the desk.

"Well Alex," said the instructor, who was just finishing his lecture on Eastern Mysticism, "I hope that you have, umm, found today's class enlightening."

Several of the students around him laughed good naturedly at his embarrassment, which he attempted to cover by quickly gathering together his books.

The instructor took out his pocket watch and announced that that would be all for the day, and though Alex was still somewhat groggy he was not at all surprised when the instructor put the watch back into his waistcoat and turned toward the door, revealing the fluffy white tail that protruded from beneath the tweed.

THE MEANING OF THE UNIVERSE

The student sat quietly, eyes closed and body motionless. The eight year old child fidgeted, shifting from one foot to the other, until no longer able to contain her curiosity, she asked, "Why are your eyes closed? Are you sleeping?"

"No," the student replied, "I am not sleeping. I am blocking my visual senses so I can understand the meaning of the universe."

"The universe? You mean the stars and the..."

The student interrupted, "The universe is more than what you see or know," the student shifted her position and opened her eyes to the lighted room, "The universe is unity of all things and events. That's the essence, the nature, of reality. A basic oneness of everything."

The student smiled.

"Does that make you happy?" the child asked, "Discovering that everything is everything?"

"Everything isn't everything," the student replied. "It is one. Unity. A combination of all parts to become one part. And I didn't 'discover' this. I'm learning it."

"From this?" The child picked up a copy of Fritjof Capra's The Tao of Physics. "Did the man who wrote this book discover it?"

"Not really," the student explained, "He writes about it though. He tells how there are similarities, parallels, between Eastern thought and modern physics. Both these groups see an awareness of the unity and interrelation of all things and events."

"Are we Eastern?"

"Not in this regard. Eastern often refers to a region and yes, we live in the eastern part of our country, but this Eastern refers to the eastern part of the world where certain religious beliefs started. Have you ever heard of Hinduism?"

The child shook her head.

The student flipped through the pages and found a passage on Hinduism, "The basis of Krishna's (one of the gods) spiritual instruction, as of all Hinduism, is the idea that the multitude of things and events around us are but different manifestations of the same reality, this reality [is] called Brahman."

"But I see lots of things in the world, how do Hindus see it as all the same thing?"

"They don't always. When they confuse the many forms of things with reality instead of realizing Brahman underlies all the forms of all things, they are said to be under the spell of maya."



Listen to how Capra states it,

'As long as our view of the world is fragmented, as long as we are under the spell of maya and think we are separated from our environment and can act independently, we are bound by karma. Being free from the bond of karma means to realize the unity and harmony of all nature.'

"How do they do that..do they read this, too?" and the child pointed to The Tao of Physics.

"No, Hindus believe the universe is beyond our intellectual abilities. It is something one cannot reason with, but must experience. They meditate and perform spiritual exercises striving for the experience of moksha. When they experience this they have realized that all things perceived with the senses are part of the same reality, and this experience brings about a union with Brahman.

"What Capra is showing in this book is that this mystical experience is similar to the views emerging in modern physics. You don't know what physics is, do you?"

Again, the child shook her head, "No."

"Physics is the science that deals with matter and motion, and physical properties and composition of things. Capra says that the study of subatomic physics expresses the same insight as the religious experience we saw in the Hindus." The student continued reading, 'the constituents (or parts) of matter and the basic phenomena involving them are all interconnected, interrelated and independent; that they cannot be understood as isolated entities, but only as integrated parts of the whole.'

"The problem scientists have in studying and defining the subatomic particles which make up all the separate parts of the universe, is that the observed system is required to be isolated in order to be defined, yet interacting in order to be observed."

"How could they do that?" The child looked confused.

"Capra tells us, 'This problem is resolved in quantum theory... by requiring that the observed system be free from the external disturbances caused by the process of observation during some interval between its preparation and subsequent measurement.' In other words, he is saying you cannot define the parts until you see the interaction and connection between the parts, and then step back and look at the experiment as one whole thing...here, Neils Bohr says it clearly, "Isolated material particles are abstractions, their properties being definable and observable only through their interaction with other systems."

"What quantum theory helps us understand, is that you cannot see the universe as a collection of separate objects, all these things you say you can see, but you have to see how the parts relate to each other to make one unified whole. A basic oneness. Sound familiar?"

"Yes. You just said the Hindus thought of that," the child observed.

"There is a strong similarity in the way nature appears in atomic physics to the way Eastern mystics have experienced it. Let me read you this passage and see if you can tell me if it sounds like a religious philosophy or something a scientist would say,

'Things that derive their being and nature by mutual dependence are nothing in themselves.'

The student paused for a reaction, but the child shrugged.

"Okay, how about this passage,

'The world thus appears as a complicated tissue of events, in which connections of different kinds...determine the texture of the whole.'

"You're saying the same thing," the child remarked.

"But the first passage was part of a religious belief and the second a statement by an atomic physicist...this basic oneness that is characteristic of the mystical experience and a fundamental view of modern physics is what I was trying to understand when I had my eyes closed so I can write a paper about this."

"Can you write it now?"

"No. I have a mental block."

"What is that?"

The student thought a moment and then explained, "It's like riding a bicycle only there's a log in front of you and you can't go forward. Waiting for the log to be moved is very difficult, because you cannot keep your bicycle upright and ready to go forward without toppling to one side or the other. But as soon as you lose your balance, you've lost your forward sense of direction. I guess you could say I've lost my forward sense of direction in writing this paper."

The child pondered this a moment, then quickly said, before scampering off, "Well, I would just take my bicycle and walk around the log!"

IDS IV  
UNIT V  
STUDENT PAPER

In Dune, a science fiction novel, by Frank Herbert, one can see a comparison between the teachings of Taoism and the beliefs of the character Paul-Muad'Dib. Both Paul and the Taoist believe that one must go beyond logic in order to understand the universe. When one does this, one is able to see the continuous change of the universe which has a dynamic interplay between opposites. In order to see the interactions, one must flow with the changes. One must use intuitive wisdom rather than rational knowledge to comprehend the universe. Both Paul and the Taoist bring these ideas into view.

Paul-Muad'Dib is the character in the science fiction novel, Dune. Paul and his family move to the planet Arrakis which is almost completely a desert land, with a lack of water, and the people there use primitive ways to survive. Paul's family came in hope that they could change the planet Arrakis into a better civilization. When they did arrive, Paul was considered the Kwisatz Haderach which means, "the shortening of the way." This is the beginning of where Paul can be compared to Taoism which is described in Capra's book, The Tao of Physics. Tao means "the way" and this is what Paul-Muad'Dib was considered to the people of Arrakis.

Logical reasoning is a concept which man must go beyond in order to understand the true universe. In Fritjof Capra's book, The Tao of Physics, he describes the ideas of Taoism. The Taoist saw logic as a part of the artificial world of man and in order to see the real world, one must go beyond logic and use intuitive wisdom to see the real nature of things. This same idea can be seen in Muad'Dib's description of the minds of man:

Deep in the human unconscious is a  
pervasive need for a logical universe  
that makes sense. But the real universe  
is always one step beyond logic.

Muad'Dib is saying that man uses his logical reasoning to make some sense of the universe, but is really blinding himself of the truth. In order to fully comprehend the universe, one must go a step beyond logic. This idea is also a belief that the Taoist hold. One must carefully observe the universe with his intuition.

When one goes beyond logical reasoning, one can gain insight and see that nature is in constant flux. Everything in the universe is constantly changing and transforming. Muad'Dib says that, "Greatness is a transitory experience. It is never consistent." He is saying that the experience of greatness is never the same. The feeling one gets with the concept of greatness is ever-changing. There is no one form of greatness. There are many types. The

The Taoist, say in a passage from the Chuang tzu that:

In the transformation and growth of all things, every bud and feature has its proper form. In this we have their gradual maturing and decay, the constant flow of transformation and change.

The Taoist saw nature continuously changing, just as Muad'Dib saw the definition of greatness being the dynamic interplay between opposites which they called the yinc and the yang. They saw a relationship between opposites. When one of the forces reaches its extreme, it then contains a seed of its opposite. In order to achieve anything, one should start with its opposite. Lao Tzu, a Taoist, sites:

In order to contract a thing, one should surely expand it first.

In order to weaken, one will surely strengthen first.

In order to overthrow, one will surely exalt first.

'In order to take, one will surely give first.'

This is called subtle wisdom.

Lao Tzu was saying that opposites are dynamically linked together, and one can obtain what is wanted by beginning with its opposite. Muad'Dib describes the link between opposites when he says, "I'm the fulcrum. I cannot give without taking and I cannot take without giving." Muad'Dib says that he is at the extremes of each opposite and in order to do one, he must therefore be doing the other. Both of the opposites are dynamically linked together.

Both the Taoist and Muad'Dib are using intuitive wisdom to form harmony with the environment around them. The Taoist, Huai Nan Tzu says: "Those who follow the natural order flow in the current of the Tao." He says those who follow the natural process of the universe spontaneously are those who are flowing towards Tao, or the way. Muad'Dib says:

A process cannot be understood by stopping it. Understanding must move with the flow of the process, must join it and flow with it.

He is stating the same thing as the Taoist. One must flow with the continuous cyclic pattern of the universe in order to gain understanding and enlightenment.

Both Taoism in The Tao of Physics, and the character of Muad'Dib, in Dune, can be compared in the aspects of their beliefs. They both say that one must go beyond logic to gain understanding. When one goes beyond logic, one can see the world as that of a transforming, continuous flux with a dynamic interplay of opposites. If one follows this cyclic flow they will gain insight. The religion of Taoism and the character Muad'Dib both are to bring "The Way," an understanding of the process and order of nature.

### The Fremen of Dune: A Marxist Society

In his work, On Marx and Engels, Vladimir Ilyich Ulianov wrote that the main tenet of Karl Marx's doctrine is "...that it brings out the historic role of the proletariat as the builder of a socialist society." By proletariat it is meant the workers, who are that class of the lowest status in society. The socialist society referred to is a system in which the means of production are controlled by the community as a whole, the members of which share in both the work and rewards of that production. In their writings, Karl Marx and Frederick Engels claimed that it is inevitable that the proletariat will one day rise up to create such a communal society. This philosophy has since come to be known as Marxism.

While true Marxism has yet to be established on earth, Frank Herbert, in his science fiction novel, Dune, has created in the Fremen a functioning Marxist society that adheres to at least four of the main principles established by Karl Marx and Frederick Engels in The Communist Manifesto: The abolition of private property, the abolition of individual nation states, the combination of education with material production, and state owned productions that bring about the cultivation of land and improvement of soil in accordance with a common plan.

In the Fremen society of Dune, as in the socialist society predicted by Marx and Engels, private property is abolished in favor of communal ownership. Private property, or capital, must be done away with, said Marx, for it is "...a collective product and only by the united action...of all members of society, can it be set in motion." Therefore, Marx continues, property is not personal, but rather "...it is a social power." For this reason it becomes necessary for the proletariat to "...destroy all previous securities for, and insurances of, individual property." This has certainly been accomplished among the desert Fremen of Dune.

Because of the harshness of life on the planet Dune, the very survival of the Fremen is dependent upon the collective ownership of the limited resources that make life possible. The food, shelter, and clothing of the Fremen are all produced and shared by the members of the sietch, or community. Water, the major indicator of wealth on Dune, is kept by the Fremen in large underground catch-basins and is the possession of the entire tribe. Even an individual's body water is communal property, as Paul-Maud'Dib, the story's protagonist, learns from his future wife, Chani. "It's the rule, she says." The flesh belongs to the person, but his water belongs to the tribe..." Marx wrote that, as part of the abolition of private

property, inheritance is to be done away with. The Fremmen practice this, also, as is demonstrated in the ritual following the death of the Fremmen, Jamis, during which each of his possessions is claimed by one of his friends. All of this assures the survival of the population that it may continue in its common purpose.

The Fremmen, while scattered about the face of Dune, have not organized into small and separate nation-states, but rather, operate as a collective whole with a common goal, which is also an aspect of the society proposed by Marx and Engels. Marx and Engels wrote in The Communist Manifesto that the socialist society of the future will see "...the exploitation of one nation by another..." come to an end, as will "...the hostility of one nation toward another..." until finally "...the nation vanishes." They felt that the proletariat have no country. The Fremmen of Dune, who can be likened to Marx's proletariat, likewise have no country.

The Fremmen tribes live in sietchs which may be comprised of as many as 10,000 to 20,000 people. There are hundreds of these sietchs scattered about the desert, ensuring that authority remains local and decentralized. Yet, while the internal affairs of each sietch are dealt with by that sietch, all operate according to a common plan and mutual goal, which is the eventual reclamation of the planet. In order for the Fremmen to transform the desert into a self-sustaining system of flowing water and growing plant life it is necessary that the entire desert population be mobilized to work toward that goal. The result of this is a system that, according to planet ecologist, Pardot Kynes, "...lets each group find its own path," while at the same time ensuring that the paths of all lead toward the common goal.

The combination of education with material production that is a basic tenet of Marxism is evident in the upbringing of the Fremmen children who are taught from birth the ways of the desert, the need for water conservation, and the common plan that will bring about the transformation of Dune. In the words of Marx it is fundamental that the state provide "Free education for all children in public schools." Furthermore, there should be a "Combination of education with industrial production." Both of these maxims are aspects of Fremmen society.

Fremmen children must be educated at a very early age in the survival techniques of water conservation that are necessary for desert living. Use of the water-saving stilsuits, techniques of desert travel, and the secret of riding the shai-hulud--the planet's giant sandworms--are all taught by the tribe. In addition, should the father and head of a family unit be killed, his wife and children will come under the care of another of the Fremmen who accepts them as his own.

In addition to basic survival training the children's education is combined with the main "production" on Dune, the shaping



of the planet's surface into a livable environment. Even in a time of danger and eminent evacuation of a sietch, Paul-Muad'Dib, the Duke of Dune, comes upon children busy chanting their lesson as the teacher points to designs on a chalkboard:

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Tree, grass, dune, wind, mountain, hill  
fire, lightning, rock, rocks, dust, sand  
heat, shelter, heat, full, winter, cold,  
empty, erosion, summer, cavern, day, ten-  
sion, moon, night, caprock, sandtide, slope  
planting, binder...

The lessons of the "Chakobsa way," the ecology of Dune, must always go that they may never be forgotten and eventually result in the reclamation of the planet's surface.

The driving force of Fremen society is one of the principles of a Marxist society: communal effort to bring about reclamation of land and conservation of soil as directed by a common plan. One of the ten aspects of a socialist society that Marx and Engels have listed in The Communist Manifesto, is the "Extension of factories and instruments of production owned by the State; the bringing into cultivation of waste lands, and the improvement of soil generally in accordance with a common plan." This is what the entire hopes, religion, and culture of the Fremen is based upon.

The Imperial planet ecologist, Pardot Keynes, had predicted in his "planetary formulae" that if the Fremen could get three per cent of the green plants on Dune involved in forming carbon compounds, then a self-sustaining cycle would be started that would change the surface of the planet. He estimated this process would take approximately 350 years. The Fremen began work toward this goal by building windtraps to collect water and underground catchbasins to hold it. In addition they planted tough desert plants and surrounded them with plastic dew collectors, that they might be irrigated. Once they had anchored the giant desert dunes with plants, animals were brought in that would open the soil and aerate it. Predators were then introduced and thus the Fremen worked, "...

building; planting, digging, training the children," according to a common plan that they hoped would establish an eco-system, eventually resulting in areas of greenness amidst the barren desert.

In The Communist Manifest; Karl Marx and Frederick Engels present ten traits indicative of a socialist system. The Fremen society in Frank Herbert's novel, Dune, contains, to varying degrees, aspects of all of them. While limitations of time and space prevent adequate presentation of all of these Marxist tenets, the four discussed (the abolition of private property, the abolition of the nation-state, the combination of education with production, and the cultivation of land in accordance with a common plan) may be seen as representational. Thus, it has been demonstrated that Herbert has, in the Fremen, created a society that, due to the pressures of environment, evolved into a functioning system that is adherent to the original principles of Marxism.



CHARLES DARWIN ON DUNE

"Below is a recently discovered letter in the hand of Charles Darwin."

My dearest Emma, something extraordinary has taken place tonight. I have been visited by two gentlemen who have introduced themselves to me as time travelers. According to them, they have been sent on a mission to cross the Universe in search of individuals who have contributed to mankind's search for identity and then supplied them with an opportunity to make observations in other time zones, with regard to their particular theories, or field of discipline. I feel honored, that they have chosen me as one to accompany them on one of their treks across the Universe. I know this sounds impossible, but I do believe them. Please, try to understand, I must go. The anticipation is almost too much for me to bear. Darling, can you imagine, these men have conquered both time and space? They say that they can travel light years, in the flash of an eye. Think of it! I will have the ability to travel the Universe in the space of a single night, and still have time to stop and make observations and evaluations. My only regret is, that I will not be allowed to bring back any organisms, notes, or sketches. Also, there is never to be any mention of what is about to take place, to anyone. The only reason that I am taking the chance and writing this letter to you, is in the event I do not return. Do not spend the rest of your life wondering what has happened to me, and blaming yourself for not being with me when I was overtaken by one of my fits.

I must hasten to make myself ready for this great adventure. The gentlemen have given me an opportunity to collect my thoughts and make a note of theories that I want to keep in mind. No matter what the outcome is, I will love you and the children for as long as I live. And I do hope, you will never get to see this letter.

Yours Forever,

FOR OBVIOUS REASONS, THIS LETTER WAS LATER REMOVED FROM DARWIN'S STUDY

## PREFACE

After having a choice of planets in the Delta Pavonis system, I have chosen Arrakis, also known as "Dune."

Because of the limited amount of time I have been given to observe the ecological adaptations which have occurred on Arrakis, I outlined only certain aspects of the planet. My concern was to observe the consequences of adaptation from my theories of biological evolution, which I first wrote about and had published on November 24, 1859, in Origin of Species. In that book, I theorized, that biological evolution had the most impact on man's origin. This assumption is based on the idea of survival of the fittest adaptation to environment. Adaptation is a result of natural selection. It equips the organism through genetic mutation to assume those characteristics and attributions that ensure strong reproduction. This includes the availability to obtain food and shelter, and thus the continuation of particular species.

"I received the following fact-sheet from the Planetologist Pardot-Kynes."

## FACT AND TERMINOLOGY

### CONCERNING ARRAKIS (TO BE SUPPLIED TO: CHARLES DARWIN-NATURALIST)

After eight years of domination under the Harkonnens, who mined the geriatric and addictive spice, melange, (which is produced only on Arrakis) for the CHOAM Company, Count Fenring and his court were removed from Arrakis and replaced by the House of Atreides, whose leader was Duke Leto Atreides. This action was a direct command issued by the Padishah Emperor, Shaddam IV, of the House Corrino. There was reason to suspect that the Emperor was maneuvered into that action by Baron Vladimir Harkonnen. The Baron's aim was to restore Harkonnen rule to Arrakis and make himself ruler of Arrakis through his nephew Count Glossu Rabban (known as Beast Rabban) thus controlling the wealth (spice) of the planet. His means of gaining control of the planet for his nephew was accomplished through treachery. Whoever controls the spice has access to unequalled wealth and Galactic power. This struggle, which has had a far-reaching effect on every planet and individual within this Galaxy, will require no further explanation.

Melange is produced by the gigantic worms which live in the deserts of Arrakis and can be mined in no other place in the galaxy. Arrakis, is a desert planet. Its environment is harsh, and the newcomer is often overwhelmed by its apparent barrenness. Sand, dunes, and heat dominate the landscape.

ABA: Loose robe worn by Freemen women; usually black.

ARRAKEEN: First settlement on Arrakis; long-time seat of planetary government.

ARRAKIS: The planet known as Dune.

BLED: Flat, open desert.

CALADAN: Third planet of Delta Pavonis.

CHOAM: Acronym for Combine Honnet Ober Advancer Mercantiles.

FREMEN: The free tribes of Arrakis, dwellers in the desert.

GREAT MOTHER: The horned goddess, the feminine principle.

GUILD: The Spacing Guild, one leg of the political tripod maintaining the Great Convention.

MELANGE: The "spice of spices," the crop for which Arrakis is the unique source. The spice, chiefly noted for its geriatric qualities,...addictive.

SHAI-HULUD: Sandworm of Arrakis.

STILLSUIT: Body-enclosing garment invented on Arrakis.

SHADDAM IV: (10,134-10,202) The Padishah Emperor, 81st of his line (House Corrino) to occupy the Golden Lion Throne.

LETO ATREIDES: (10,140-10,191) A distaff cousin of the Corrinos. House Atreides ruled Caladan as a siridar-fief for twenty generations until pressured into the move to Arrakis.

LADY JESSICA: (Hon, Atreides) (10,154-10,256) A natural daughter of the Siridar-Baron Vladimir Harkonnen.

VLADIMIR HARKONNEN: (10,110-10,193) Referred to as Baron Harkonnen, his title is officially Siridar (planetary governor) Baron.

#### ADAPTATION: DUNE ECOLOGY

When I traveled as a naturalist aboard the Beagle, I had occasion to travel to many unusual places, but nothing had prepared me for Dune. I felt no physical discomfort but it seemed to me that the heat would overpower me, and I experienced a great desire to preserve my body waters.

But my comfort or discomfort has nothing to do with what I saw. I was supplied with general information and a terminology sheet. After a brief orientation by planetologist, Pardot-Kynes, I decided to focus my attention on the Freemen of Arrakis and the worms. The reason I had picked the Freemen to observe was that they are the native human inhabitants of the planet.

The worms and their by-product seemed to be the prime shapers of the planet.

My companions and I first arrived at the government mansion in the city of Arrakeen. In the great hall was Lady Jessica, Count Let's concubine, and the mother of his only son, Paul. Here I first saw Duke Leto informing Jessica, of the fact that she had a head housekeeper. (I was grateful for the ability to remove the constraints of time, and be able to see both the future, present and past.) For I already saw the confrontation that Jessica would have with her new head housekeeper, a Frewoman, by the name of Shadout Mapes. I saw Jessica as she was surprised by Mapes appearance, and I must say, that I was a little startled myself. (I recalled my previous impression of the Fremmen after traveling through town. "I thought then, "these Fremmen are small in stature, and seem to have a dry look about them." I noticed too that something was wrong with their eyes, but I could not tell exactly what it was.) When I looked directly at one (Fremmen), I saw that the eyes were striking, and the total look of the women was despairing. (Herbert, Frank. Dune). "The woman looked as wrinkled and desiccated as any member of the mob that had greeted...prune dry and undernourished...there were the eyes...that wash of deepest, darkest blue without any white---secretive, mysterious". As I watched that encounter unfold, I realized some type of ritual was taking place. Mapes had bared her bosom to Jessica who was holding some type of knife in her hand, and she then took the knife and drew a small scratch with the blade's edge across the upper portion of Mapes' breast. But something strange was taking place, the blood stopped almost immediately. I had never seen this happen before, could this be adaptation at work? (Herbert, F. Dune). "Ultrafast coagulation... A moisture-conserving mutation?" I can remember thinking, "I must try to find a male native and compare their appearance to Mapes."

I was standing with Duke Leto who was about to meet the planet's ecologist (who was formally called a planetologist) Kynes, for the first time. I was struck by that Fremmen also, there was something quite unsettling about him. (Dune, p.107) "...tall, thin, dressed for the desert in loose robe, stillsuit, and low boots. The man's hood was thrown back,...revealing long sandy hair, a sparse beard. The eyes are that fathomless blue-within-blue under thick brows. Remains of dark stains smudged his eye sockets." There was still not near enough evidence for me to begin to make any judgements concerning the possibility that those blue-within-blue eyes are genetically acquired, or chemically produced by some type of reaction induced by the spice which seemed to be in everything on that planet, I am sure that the very air was filled with it.

For the moment I must leave the issue of whether those blue eyes of the Fremmen and the ultrafast coagulation of blood, is a genetic mutation.

From the general information sheet I had been given before our departure, and the conversations I had overheard concerning the spice production worms of Dune, my curiosity had been aroused. Therefore, I was glad Kynes, the planet ecologist, was taking the Duke on an inspection of the sand area where the spice is mined and the large sand worms dwell. We were all viewing a factory crawler in operation, and although there were four spotters, (aircraft used to spot worms approaching), the large aircraft used to remove the spice mining factory was missing, and at this particular moment it would have been advantageous for one to be in position. The Duke and Kynes had spotted worm signs from the aircraft they were riding in. (Dune p.118-119).

"Where the Duke pointed, crescent dune tracks spread shadow ripples toward the horizon and, running through them as a level line stretching into the distance, came an elongated mount-in-motion-a cresting of sand."

I, in all my days had never seen anything to compare with the sight that unfolded before my eyes. Something was agitating the sand around the crawler. A huge sand whirlpool began forming near the crawler, and dust was everywhere, kicked up by that whirlpool and a wide hole appeared around the crawler. Suddenly everything disappeared or should I say, everything seemed to have disappeared for the hole that swallowed that crawler must have belonged to a monster.

Now, this series of events brought to mind the paper I had written concerning "The Formation Of Vegetable Mould Through The Action Of Worms" in 1881. In it, I noted that earthworms eat decayed leaves, chalk, earth, and even concrete. They swallow the earth or other substances, and grind it down to a fine powder. They do this grinding in their stomachs and bring it up to the surface and cast it off as waste product. In one case, by calculating the weight of the waste material thrown up on the surface of a square yard of land, the quantity of soil brought up to the surface by worms in an acre in a year was about eighteen tons. When I compare those earthworms that were studied in England in my time to these creatures, I cannot help but wonder if they had a part in the formation of this desert environment. My answer to my own question came from the ability to transcend time zones that I was given when I embarked on that venture. Pardot Kynes, who was Liet Kynes father, was the first planetologist of Arrakis. Kynes believed that an environment regardless of

how hostile it appeared, could support life and provide a reasonably comfortable existence for its inhabitants. Arrakis according to Kynes, could be a paradise, for the planet had enough moisture in its air; it was the extreme heat that produced a dry desert like ecosystem. (Dune. p.497), Kynes believed that, "There'd been open water on Arrakis-once. He began re-examining the evidence of the dry wells where trickles of water had appeared and vanished, never to return." This happened whenever Kynes would drill a well, and he could think of no provable explanation as to why the change in the environment took place. But slowly Kynes acquired evidence to support this claim of a "sandtrout", of course I cannot say that I would accept the same things that he considered reliable as a source to add substance to these claims. I will not attempt to explain his findings instead I will quote from notes I have seen that he made. (Dune. p.497)

"As facts grew into evidence, a creature emerged...a sandswimmer that blocked off water into fertile pockets within the porous lower strata below the 280\*(absolute) line. This 'water-stealer' died by the millions... The few survivors entered a semi-dormant cyst-hibernation to emerge in six years as small (about three meters long) sandworms."

And here contained within his notes was the comparison between Kynes giant mature sandworms and my English earthworms. Dune's sand worms ate the microscopic creature within the sand. The rocks and sand served as food for the sandworm. The worms digest the food and its waste product becomes the spice, but after the worm has eaten and ground the rock it becomes sand, therefore, Dune is mostly a product of the worm's appetite- just as the earthworms in that English field produce more fertile soil. What a predicament these folk find themselves in. They must have the worms to produce the spice, which means wealth to anyone who controls it, for their economy is built on the mining of spice. Yet, how are they to have both a desert and fertile crop producing soil at the same time and strike a happy balance?

So, it seems time for us to be moving along. My companions, the time travelers are warning me that I will not have enough time to visit any other galaxy if I do not bring this visit to a halt. I have made my observations, and have found that they are too limited to make any evaluation concerning the aspect of adaptation as it pertains to this particular ecosystem. I do not know whether the Fremmen blue-within-blue eyes or his blood's ability to clot quickly is due to genetic mutation or a chemical reaction. I feel more secure in saying that there does seem to be a comparison between sandworms and earthworms, therefore, possibly sandworms are the producers of the sand which dominates Dune's planet.

## POSTSCRIPT

Nov. 19, 1881

Last night I was unable to sleep again, it seems to be a condition that is occurring with more frequency as I advance in age, therefore, I decided to clean out a few compartments of an old desk that my son Erasmus had pushed into a corner of my study. In one of the compartments, I discovered a letter that I wrote last August, and I cannot begin to imagine what dream I was referring to, nor do I remember having had any hallucinations. Of course, that is not to say that it did not happen. Something took place, for the letter is in my own hand writing.

I find that I am torn between showing this letter to my son, Erasmus, or just discarding it as the aftermath of a bad dream. But, for some unexplainable reason I am unable to throw it away. Somewhere in the recesses of my mind, something keeps trying to take form, only that form will not take shape.

I am an old man and I am not well, I will not worry myself any longer about it. Then again, perhaps I will keep it, and not show it to anyone. It is mine!!

Aug. 29, 1881

It is very early in the morning and I have just awakened to find that I have fallen asleep on my reading couch in my study. If I do not take care, I will probably catch my death of cold. I had a very odd dream last night, and although I can only remember a few parts of it, the parts I do remember do not make much sense. I seem to have been flying around in some type of flying craft, that soared through the air at great speeds, and people traveled aboard huge crafts that commuted between different planets.

I must remember to talk to the doctor about this, perhaps he can give me something for hallucinations. I do not care to subject myself to such far-fetched things as flying machines and visits to other planets. People already think that I am a bit touched in the head, and if these dreams continue, I will probably write about them and get myself into a lot of trouble. Of course, that seems to be very easy for me to do.

Charles Darwin